

A SERVICE-WIDE FORMAL EDUCATION
PROGRAM ON THE COLLEGE LEVEL
FOR THE U. S. NAVY,

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A SERVICE-WIDE FORMAL EDUCATION PROGRAM
ON THE COLLEGE LEVEL FOR THE U. S. NAVY

A Thesis

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CHAPTER I

STATEMENT OF THE PROBLEM

With the re-opening of armed world conflict in Korea on June 25, 1950, the winds of the East-West cold war suddenly blew hot. The people of the United States (and their policy-makers in world politics and matters of national defense) had concrete evidence that the tumultuous years ahead would necessitate our having a large, well-trained, and fully-equipped military force ready to do battle with a formidable enemy on very short notice. Consequently, the creeping demobilization process of the late 1940's came to an abrupt halt. The Administration and the Congress set about the task of putting our armed forces on a footing equal to the occasion.

This second great mobilization of men and machines within a decade is creating the same problems for our military and civilian leaders and for individual citizens as did the first. Among these problems is that of education. Once again, young high school graduates are finding themselves in boot camps rather than on college campuses. Once again, college students are being called away from their pursuit of higher education. Once again, in offering their assistance and cooperation to the armed forces and other defense-related institutions, many of our colleges and

universities are faced with the problems of adapting curricula and speeding up courses to meet the urgent needs for skilled technicians and capable administrators.

The many problems brought to the surface by this close working relationship between the armed forces and our educational institutions are now the proper and serious concern of the American Council on Education, among other agencies. In July 23, 1950, Dr. George F. Cook, then President of the Council, addressed a letter to all college and university presidents in which he pointed out the growing seriousness of the international situation and its possible effects on higher education. In this letter he made the following suggestions:

To recommend that you or some member of your staff whom you appoint be designated as the individual who will be the point of contact between your institution and the American Council on Education in the present emergency.

To suggest that each institution make an immediate appraisal of its staff to determine relative essentiality in continuing the program of the institution.

To suggest also that each institution initiate a survey of its physical plant to determine the types of services which can be made available if events prove that it is necessary.¹

¹ American Council on Education. "Second Council Conference on the Role of Colleges and Universities in the Present Emergency." Bulletin, Higher Education and National Affairs, No. 157, August 14, 1950, p. 1.

The first part of the paper discusses the importance of the study and the objectives of the research. It then proceeds to a literature review, followed by a description of the methodology used in the study. The results of the study are presented in the next section, followed by a discussion of the findings and their implications. The paper concludes with a summary of the main points and a list of references.

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On August 5, 1950, the Council convened a conference of representatives from the following agencies: Office of the Secretary of Defense -- Personnel Policy Board, Division of National Services, Army, Navy, and Air Force; National Security Resources Board; Research and Development Board; Selective Service; U. S. Office of Education; 17 national educational organizations; and three of the Council's committees -- Executive, Problems and Policies, and Relationships of Higher Education to the Federal Government. The purpose of this conference was "to explore, with the representatives of the governmental agencies primarily responsible for the determination of policies regarding the training and utilization of manpower, the most effective utilization of colleges and universities in the national emergency, and to establish the channels for the cooperative development of plans for such utilization. It is evident that plans for the future should be predicated upon a prolonged period of military preparedness and possible armed conflict, even one involving maximum resources. It is evident also that plans must be flexible and subject to modification in the light of almost day-to-day changes in the international situation."² The positive spirit and determination of the participating agencies were

² American Council on Education, op. cit., pp. 1-2.

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evidenced in the following letter which was sent to President Truman at the conclusion of the conference:

The experience of World War II...demonstrated the heavy reliance of the Federal Government, and especially the armed forces, on the colleges and universities of the country for specialized training programs, skilled specialists, technological education, and scientific research. The purpose of this conference is to insure the readiness of those institutions to make this experience available as needed to the various agencies of the Government.

In consequence to the advent manipulations of the Communists we are threatened if not with immediate large-scale war, at least with a decade of uncertainty and tension. Under such circumstances the central problem of higher education is that there be effective utilization of the 100,000 staff, two and a half million students, and the three billion dollar physical plant of our 1,800 colleges and universities. ³

The next major step of any consequences by the American Council on Education was the Conference on Higher Education in the National Service held on October 6-7, 1950. In attendance were nearly 600 college and university officers, 400 of them presidents of institutions of higher education; representatives from 31 national organizations in higher education; and 140 representatives from various governmental agencies. The purpose of this conference was "to provide an opportunity for representatives of higher education and of government cooperatively to plan for the

³ American Council on Education, "Preliminary Report of August 3 Conference of Council Members, Representatives of Seventeen National Educational Organizations, and of Governmental Agencies," Illinois, Higher Education and National Affairs, Emergency Supplement No. 61, (August 7, 1950), pp. 1-3.

effective utilization of our colleges and universities, both for the long-range future and to meet immediate and foreseeable emergency needs. It (was) hoped that through such joint planning ... basic principles and policies (would) be developed that may be the basis for such action as the extent and tempo of the emergency may require." ⁴

The following letter from the President was read at the opening session:

The people of the United States are accustomed to look to their colleges and universities for leadership and service, both in normal times and in times of unusual stress and strain. The institutions of higher education provide a reservoir of resources of almost importance to the national welfare and defense. They have always been willing to devote their resources resolutely and generously to the service of the country in any hour of need. Particularly during World War I the universities and colleges gave unstintingly of their manpower and physical facilities to the winning of the war.

In the present period of international conflict the country may again find it necessary to call on its colleges and universities for extra-ordinary services. Those who guide the destinies of educational institutions can with propriety be taking thought individually and collectively about plans and programs which may contribute to the national effort as future circumstances may require.

I cannot most heartily the efforts made on behalf of such objectives by this conference on higher education in the national service. ⁵

⁴ American Council on Education. "Preliminary Report of Conference on Higher Education in the National Service," Bulletin, Higher Education and National Affairs, Emergency Supplement No. 64, (August 7, 1935), pp. 1-3.

⁵ American Council on Education. "Preliminary Report of Conference on Higher Education....", pp. 1-3.

Among the motions made and passed at the conference were the following:

THAT in order that higher education may make the maximum contribution to the national effort in this emergency and in the continuing period of partial or full mobilization ahead, it is urged that the civilian and military authorities responsible for the assignment of training and education programs to the colleges and universities of the country make maximum effort to use all such institutions regardless of their size, type of organization, years of work included, sex, or race.

THAT the American Council on Education urge the National Security Resources Board, the Armed Forces, and other appropriate Government agencies to provide for a more extensive utilization of the facilities and resources available in the colleges and universities of this country; and further urge that specific consideration be given: (a) to study and formulate the theory and methods of establishing and maintaining schools among testees; (b) to the extension of ROTC programs to as many colleges as possible; (c) to the establishment of other programs of training and education which will serve the national interest; and (d) to the utilization of colleges for training officer candidates and other personnel under programs to be established. ⁶

Thus, it is apparent that the administrators and professional educators in our colleges and universities are aware of the mobilization potentialities of these institutions and will welcome prompt and complete utilization of these potentialities. Careful planning, organizing, and coordinating by the responsible government agencies, including the respective members of the armed forces, is the order of the day.

⁶ American Council on Education, "Preliminary Report of Conference on Higher Education....", p. 4.

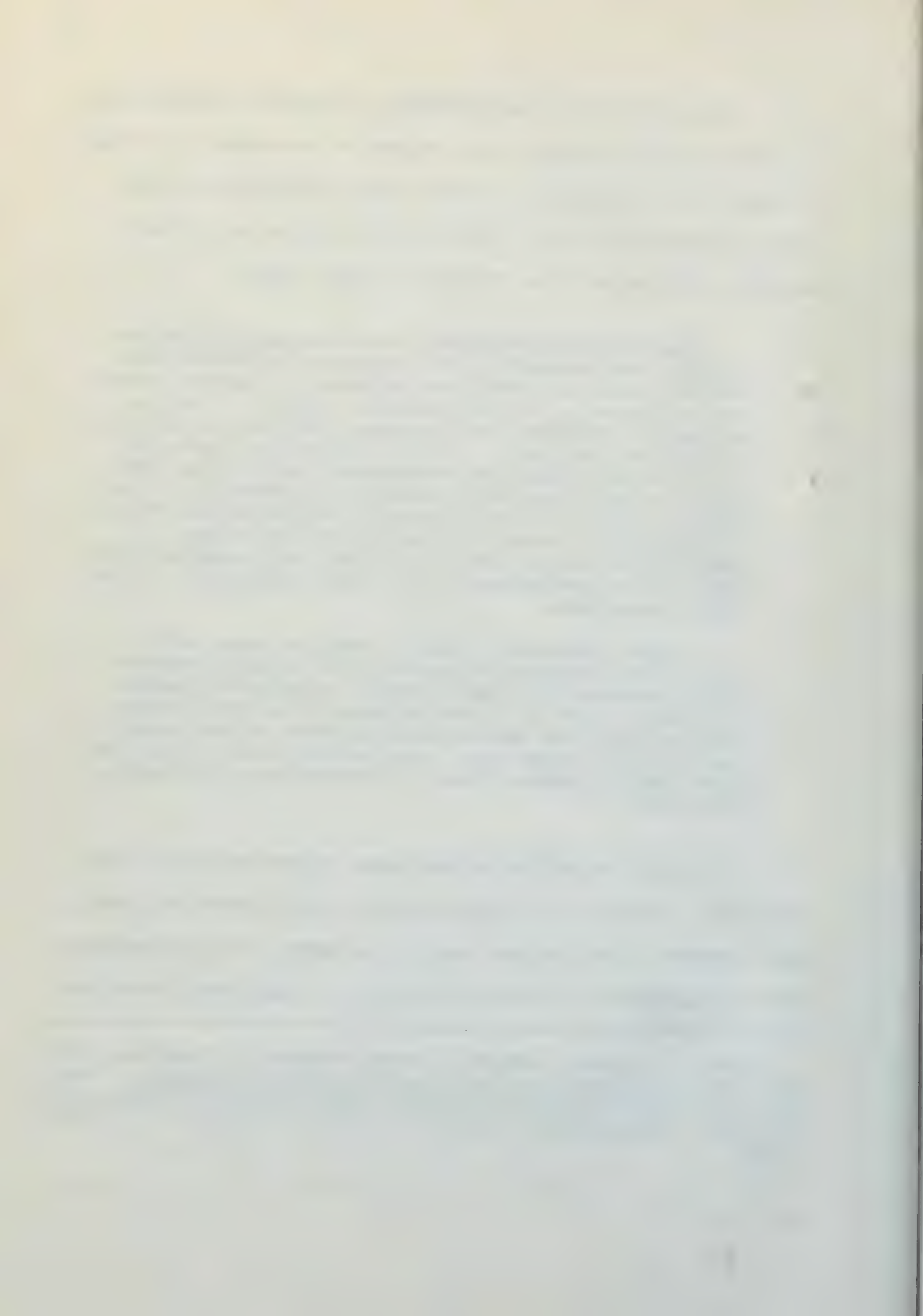
In considering the problems of higher education in the Navy in this thesis, the author is concerned with what is known as "voluntary" or "off-duty" education and not with professional Navy training. The following passage explains the concept as treated in this paper:

Ordinarily we think of wartime armed services training as consisting of duty-time activities embracing basic military and physical training, study and practice in the maintenance and use of ships, aircraft, vehicles, and weapons, and the tactics of offense and defense. It will not do to overlook the off-duty voluntary educational activities designed to maintain high morale by affording a connecting link with the cultural facilities the fighting men had at home, a stimulus to look ahead to eventual return to civilian life, and an encouragement to the development of a sound philosophy of the citizen-soldier.

These functions closely parallel some of the aims of the peace-time enterprise of adult education: Provide all adults with a stimulating means of using a part of their leisure time; make available to them the cultural facilities of their own communities; encourage them to play their lives far ahead not to forge their philosophies as citizens of the world.⁷

Efforts to afford educational opportunities to the soldiers, sailors, and airmen in the armed services during this present world crisis are by no means being undertaken from a cold start. During World War II the armed services

⁷ Cyril C. Houlo, Robert E. Kerr, Thomas H. Hamilton, and John H. Yale. The Armed Services and Adult Education. For the Commission on Implications of Armed Services Educational Programs. Washington: American Council on Education, 1947, p. v.



built up very effective off-duty education programs. These programs were continued, at least in part, during the post-war years. The over-all quality of the programs took a sharp drop during the period of emotional turbulence that followed V-J Day. Thereafter they continued gradually downward for the following reasons: 1) The demobilization of experienced educators and educational administrators, and 2) The lessening of public pressure and official concern regarding educational opportunities for the career service man, who was in a somewhat different position than the soldier-citizen who was in uniform "for the duration" and who, therefore, could look forward to an early return to civilian life.

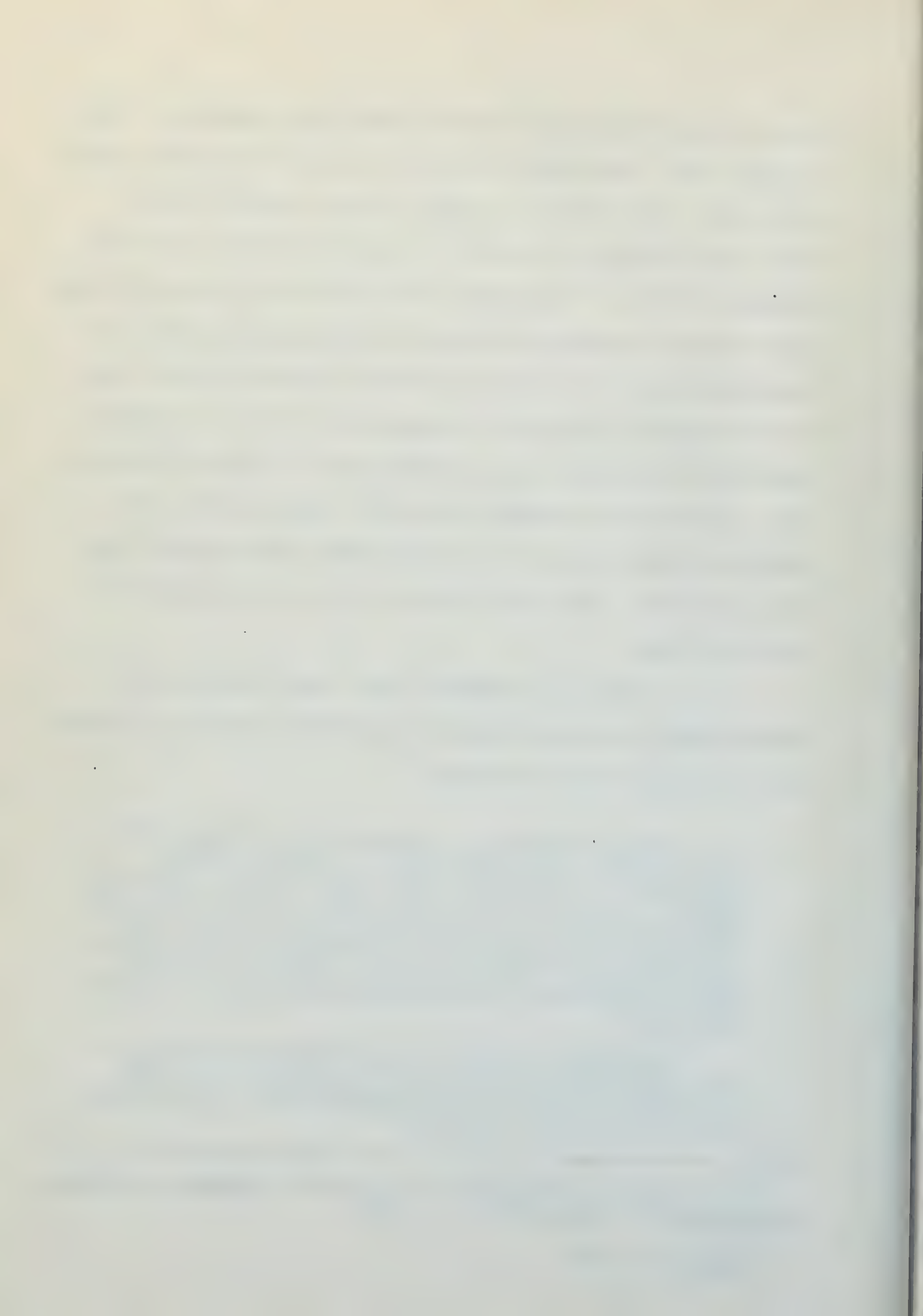
J. W. Mason, in writing about the lessons to be learned from the armed forces educational programs of World War II, suggest the following:

The real question concerns what colleges and universities can learn from the present (1944) situation for their own advantage in the post-war years. It seems likely that more and more efforts should be made to provide opportunities for higher education in accordance with ability and necessity. The successful functioning of a modern democracy depends in large part on better education for more people. ⁸

...The way is open for a reorientation of the traditional function of the college and university in terms that are appropriate to the second half of the 20th century. ⁹

⁸ J. W. Mason, "How Have We Learned?", Journal of Higher Education, IV, (June 1944), p. 257.

⁹ Ibid., p. 298.



The process of education is, essentially, one of bringing together the educator and those to be educated, for a planned treatment of a given subject. The American colleges and universities have the educators; the ranks of the armed forces are rapidly expanding with men and boys needing and wanting higher education. The problem to be considered in this thesis, then, is this: How can the Navy best take advantage of the opportunities offered by the facilities, personnel, and services of the nation's colleges and universities in establishing a service-wide education program on the college level and in maintaining such a program so that its objectives may be achieved with reasonable success?

CHAPTER II

THE NEED FOR A FORMAL EDUCATION PROGRAM IN THE NAVY

The Navy could not be expected to adopt a vigorous program of "education for the sake of education." Such a program would neither warrant the necessary expenditures of time, effort, and money, nor justify the purposes for which our Navy was created and is maintained. However, a real need for a formal college education program does exist in the Navy today, from the point of view of (1) the Navy as a whole, (2) the enlisted men and officers as individuals, and (3) the nation as a whole.

Continued Indoctrination in American Ideals and Issues in World Politics.

The tentative off-duty educational program announced by the Bureau of Naval Personnel on May 27, 1943, under the title of "Navy Voluntary Wartime Education" had as one of its objectives "continued indoctrination in war issues and American ideals."¹ This same objective was carried over to the more extensive "Educational Services Program" when it was established and it remains today as a primary objective

¹ Cyril C. Soule, Gilbert W. Barr, Thomas H. Hamilton, and John W. Yale. The Armed Forces and Adult Education. Washington: American Council on Education, 1947, p. v.

of the "Information and Education Program."² This program sets forth the following as the purposes of its information phase:

To provide all hands with:

- a. A comprehension of the principles of American democracy.
- b. A recognition of the current issues in national and international affairs.
- c. An understanding of the mission of the Armed Forces, both as individual services and as a unified team.
- d. A realization of the importance of the individual in the American concept of life, and of his responsibilities and obligations as a citizen.³

The ideological phase of the present world conflict -- communism versus democracy -- has taken on such importance in recent years that the above-mentioned purpose has become an imperative objective. The flame of communism is fanned by ignorance and dissatisfaction. It is not enough that our civilian and military leaders understand the facts and realize that the grass is not greener on the other side of the fence; in our way of life each individual citizen decides his own political beliefs.

² Effective September 20, 1950, the name "Educational Services" was replaced by "Information and Education." The Navy I & E Program implements the policy of the Armed Forces I & E Division as approved by the Personnel Policy Board, Office of the Secretary of Defense.

³ U. S. Department of the Navy. "Information and Education Program," Bureau of Naval Personnel Circular Letter No. 155-61, Navy Department Bulletin, XVII, No. 6, (September 30, 1950), p. 121.

Democracy is not entirely self-propagating, even in a country such as our own. It must have its "propaganda," too. The facts and figures, the principles involved, the benefits and obligations -- all must be presented to each individual. The Navy does this for the citizens in its ranks through the Information and Education Program.

Another important consideration is the role of the American service man in world public relations. The marine fighting in a foreign land, the soldier on occupation duty in a conquered country, the sailor on liberty in a foreign port -- all must put forward the best foot of democracy when the occasion to do so arises. These men are the ambassadors of democracy to the common man in countries overseas. They must be educated accordingly.

B. H. Bode, in setting forth education's point of view, wrote the following:

Never before has education had so great an importance and so large a task as at the present (1947) time. Never before has the teaching profession had so great an opportunity to provide ample justification for the faith of the American people in education and their tradition of democracy and to make an indispensable contribution to the future of our country as a nation and to the future of civilization in the world.⁴

⁴ B. H. Bode, "Accrimation in Education," Pittsburgh-Crabbe Foundation Lecture Series, Vol. I., Pittsburgh University of Pittsburgh Press, (1947), p. 27.



J. Roger Carter, the Education Officer at the British Embassy in Washington, D. C., might have been thinking of the current world when he wrote the following:

After all, if democratic society is to survive, and not merely survive but to grow more perfect, certain attitudes and convictions must prevail, not only, as in early aristocratic societies, among the members of a narrow ruling class, but throughout the whole people. It is important here to think not of the "masses" or the "proletariat," or of any such collective conception which emphasizes uniformity, but of an enormous aggregate of individual persons, each whose convictions about life and his fellow men is of importance for the well-being of society. Any system of education which does not help him to consider these things may indeed make him a skilled workman but will not bring him forth as a good citizen. ⁵

Improvement of In-Service Efficiency of Officers and Men.

The improvement of in-service efficiency of officers and enlisted men would be an important result of a Navy college education program. Citing a few obvious examples of Navy jobs and related college courses, we find: shore patrol duty in a foreign country and the appropriate foreign language; aviation structural mechanics and hydraulic engineering; electrician's mate and vector analysis; any kind of petty officer rating and supervisory management; etc. The list could go on indefinitely. College courses such as those, taken by Navy men in a college program, would greatly supplement the training received in Navy technical schools and would serve to increase the efficiency of the individuals

⁵ J. Roger Carter, "Education in Tomorrow's World: Issues To Be Faced," School and Society, 71, No. 1037, (March 6, 1960), p. 150.

concerned.

During his tour of duty as personnel officer in a Navy fighter squadron, the author noted that those men who were active in an off-duty education program either had or developed a higher degree of mental discipline than the men who spent none of their leisure time in educational activities. This difference in degree of mental discipline was very obvious when comparing men on their jobs. It set off the man who wanted to advance himself from the man with no ambition. It differentiated the man who took pride in his work from the man who merely followed his chief's instructions. It was evident also in the day-to-day personal appearance of the men.

The effect of good morale on efficiency is unquestioned. Carl J. McCreath, U. S. Commissioner of Education, wrote the following while he was a lieutenant commander active in the Educational Services Program:

The value of this program cannot be fully appreciated until one recalls the limited range of activities available to military personnel when they are not actually engaged in combat. The morale-building effect of this type of diversional activity is well recognized by students of the mind. Practical recognition of the same fact appears in the testimony of commanding officers and the medical staff located at isolated or inactive stations. They assert that the morale of the station is improved and that the incidence of minor emotional disturbances is reduced by off-duty educational opportunities. This program, and whatever expenditures of money and men are involved in its upkeep, are amply justified

by the returns in improved military efficiency, and by the benefits to the future welfare of America. ⁶

Supplementation of the MILITARY TRAINING PROGRAM for officers who have transferred into the Regular Navy from the Reserve or from Temporary Duty.

Following the end of hostilities in 1945, a considerable number of reserve officers and temporary duty officers were integrated into the regular Navy. Inasmuch as advancement in the Navy is on a competitive basis, those of these officers who were not college graduates were at a disadvantage in competing professionally against Naval Academy graduates in their effort to make the Navy a career. The Bureau of Naval Personnel referred to this problem in a Circular Letter:

1. The board created by the Secretary of the Navy to study the proper form, system, and method of education of the U. S. Naval officers of the post-war U. S. Navy recommended that all transferred officers be provided with additional education as necessary, to provide educational equality with their contemporaries.

2. The board recommended that all transferred officers who have not previously completed more than two academic years of college education be assigned to INROTC colleges for further study on an accelerated basis. Students so enrolled shall insure by the time they have completed the number of semesters permitted them that their education includes:

⁶ Earl J. McCreath, "Navy Off-Duty Education and Post-War Educational Re-Adjustment," Harvard Educational Review, XIV, (March 1944), p. 98.

THE HISTORY OF THE CITY OF BOSTON

The history of the city of Boston is a subject of great interest and importance. It is a city of many centuries, and its history is full of interesting events. The city was founded in 1630, and since that time it has grown into one of the largest and most important cities in the world. It has been the site of many important events, and it has played a large part in the history of the United States. The city is known for its many famous landmarks, and it is a city of great beauty and interest. The history of the city is a story of growth and development, and it is a story that is full of many interesting and important events. The city has been a center of commerce and industry, and it has been a city of great importance and influence. The history of the city is a story that is full of many interesting and important events, and it is a story that is full of many interesting and important events.

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a) Satisfactory completion of courses in mathematics through solid geometry and trigonometry.

b) Proficiency in written and oral use of the English language.

c) Satisfactory completion of a year course in college physics.

d) Satisfactory completion, in accordance with the regulations of the college, of other courses elected by the student officer and approved by the professor of naval science and the academic authorities.

3. The above program for additional academic education was considered necessary to ensure all officers of the post-war Navy of that comparable academic background necessary to assure equality of opportunity for advancement in their professional careers. The Secretary of the Navy on 30 October 1944 approved these recommendations of the board and directs that the necessary steps be taken for implementation. ⁷

The College Training Program was well received by the officers concerned, the necessary funds were made available, and the program got underway with much enthusiasm and high expectations. However, drastic cut-backs in authorized expenditures forced the issuance of the following form letter in May 1945 to the officers concerned.

...You are considered eligible for additional college training in accordance with the provisions of ref. (b) (the above-cited letter). Budgetary limitations have limited the number of officers that can

⁷ U. S. Department of the Navy. "Further Academic Training for Reserve and Temporary Duty Officers Transferred to the Regular Navy (The College Training Program)." Bureau of Naval Personnel Circular Letter No. 150-47. Naval Personnel Bulletin, Cumulative Edition (December 31, 1949), p. 33.

be enrolled in the program to such an extent that all officers who were originally scheduled for college and general line post-probate training may not be able to complete the program until approximately 1960...⁸

Thus for a substantial portion of the officers concerned the opportunity they had hoped to embrace was (temporarily) withdrawn due to the financial condition. In spite of the increased military appropriations in 1960, the enlarged responsibilities of the armed forces due to the action in Korea have not permitted a resumption of this desirable educational program. This slack might well be taken up by making a college training program available throughout the Navy as a whole. Such a program would enable transferred officers to take college courses while remaining in an active duty status, thus bettering themselves while at the same time they are rendering their regular services to the Navy.

One serious shortcoming of the College Training Program from the point of view of many of the officers concerned, was that upon completion of the college semesters permitted them, many of the officers concerned found themselves still a few credit hours short of the number required for a degree. Here again, a college program available to personnel in a

⁸ U. S. Department of the Navy. "Navy Five-Year College Program," Bureau of Naval Personnel Letter Pers-4442-1ra, dated May 3, 1948. A fore letter addressed to the individual officers concerned.

regular duty stems would make it possible to finish the work required for a degree.

Comparison of the Educational Levels of Navy Petty Officers with Their Levels of Technical Training.

During the rapid expansion of the Navy in World War II, a large number of senior petty officers were promoted into the officer ranks. Many junior enlisted men likewise experienced rapid promotion to senior petty officer rates. Captain Alan B. Soby, USN, former Officer-in-Charge, Warrent Officer Distribution Section, Bureau of Naval Personnel (September 1944 through August 1946), and now a Congressional liaison officer, considered the educational deficiencies evidenced by these promotions in his thesis, "Education of Petty Officers in the United States Navy":

It is the writer's opinion that, in the years preceding the entry of the United States into World War II, the Bureau of Naval Personnel failed to meet one of its most important responsibilities ...the training of enlisted men in their various specialties had been over-emphasized at the expense of a general well-balanced education; that lacking a sound educational background, many of the experienced and highly-trained enlisted men could not adequately meet the high standards of performance, initiative, and leadership that was needed of them. ⁹

...Upon being promoted to officer rank these outstanding petty officers, of the kind under discussion, found themselves at first in advisory and supervisory positions of a technical nature, in the

⁹ Alan B. Soby, Education of Petty Officers in the United States Navy. Unpublished M.A. thesis. Ohio State University, 1947, pp. 1-2.

field at which they were accomplished, the field of their own specialty. Here they succeeded quite well and as a result of this success found themselves being carried along by unwise temporary promotions to the point either past and beyond... As time passed more enlisted men rose to the rank of officer and those who had been promoted earlier were gradually relieved of their technical responsibilities by the newcomers. They came to find themselves no longer considered as specialist officers but rather in the role of general line officers. They became department heads and executives of the larger auxiliary and smaller combatant ships, commanding officers of tops and landing craft, division officers and assistant department heads of larger combatant ships, and in charge of activities at advance bases. In short, they came to occupy important, if not key, positions throughout the Navy's wartime organization.¹⁰

It is the writer's opinion that the great majority of ex-enlisted officers were inadequate in several respects in their performance of duty as line officers. ...The shortcomings of officers with a college background had their roots, for the most part, in youth and inexperience, while the weaknesses observed in the experienced and more mature ex-enlisted officers arose from their poor educational background and need not have existed. In other words, it is the writer's belief that the "fairly poor" class of officer which came up through the ranks could have been an excellent class of officer had the Bureau of Naval Personnel placed more emphasis on raising the educational level of the petty officers during the years preceding World War II. The opinion herein expressed of the general inadequacy of the ex-enlisted officer is based upon a review of approximately 250 officer's Fitness Reports covering this class of officer and some 5000 officer's Fitness Reports on warrant and commissioned warrant officers prior to their promotion to ensign.¹¹

To this opinion the author adds his own observation the majority of senior petty officers in the Navy today are

¹⁰ Roby, op. cit., pp. 16-17.

¹¹ Ibid., pp. 17-18.

definitely lacking in the educational background necessary to meet effectively the responsibilities of leadership and supervision that their respective rates demand. A chief petty officer is called upon to be -- in addition to a skilled technician -- an instructor, a planner, an organizer. It is the exception to the rule when a chief petty officer serves as only a skilled technician. His status in the Navy is comparable to that of a foreman in a civilian factory -- he is responsible to higher authority for the performance and conduct of the men under him. It is not uncommon for a chief petty officer in one division of a given command to have relatively greater executive authority and responsibility over a larger number of men than one or more junior commissioned officers in other divisions of the same command. Petty officers who are in such positions of authority and responsibility or who are likely to find themselves in such positions through promotion or transfer, should have ample opportunity to supplement their experience with formal education and thus to prepare themselves for more effective execution of their assigned duties.

Another consideration is that one source of respect that men have for a leader is based upon recognition of the leader's educational standards and achievements. In the day-to-day routine of military life in the Navy even the most gifted leaders in the petty officer (and officer)

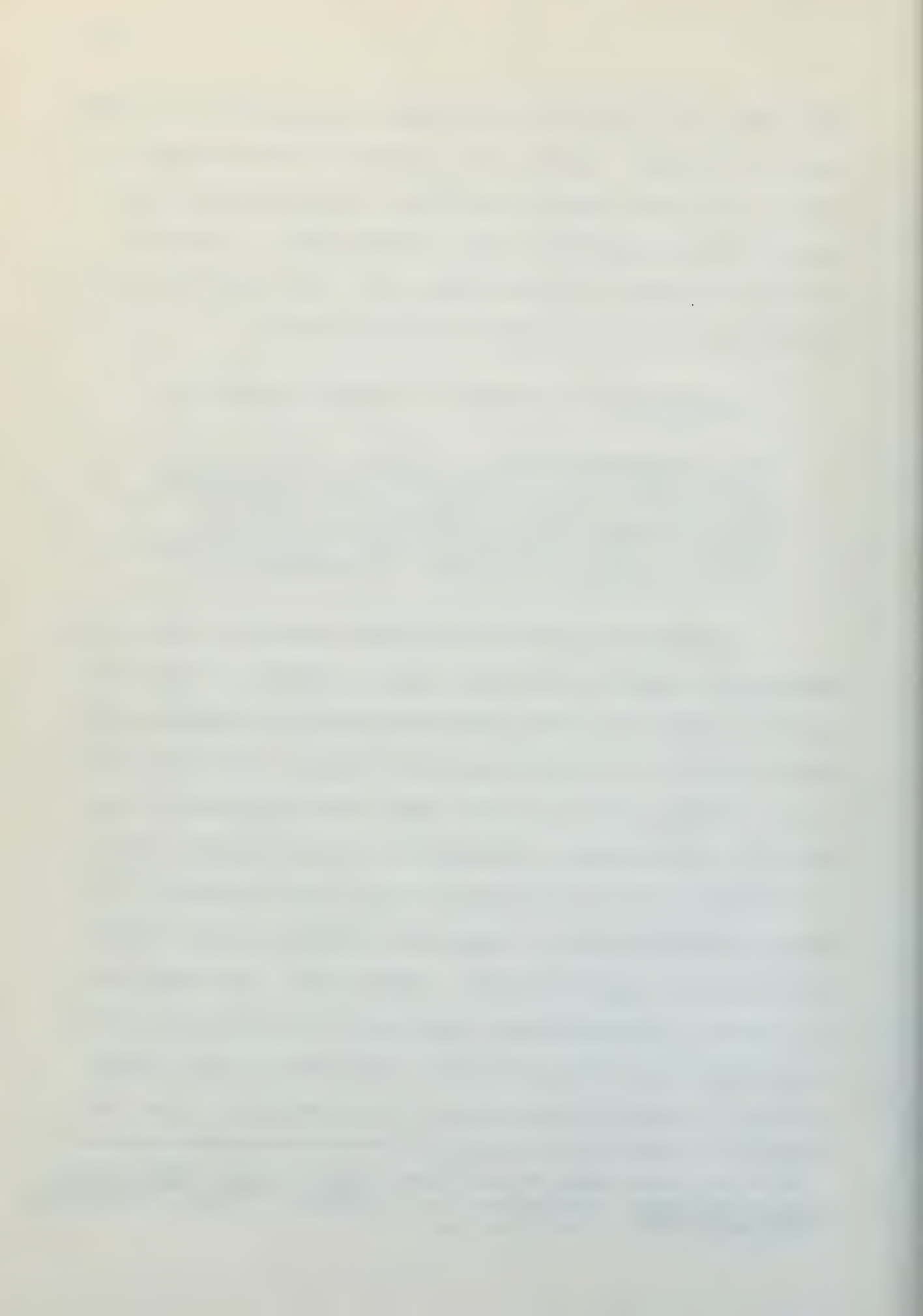
rank find that gaining and holding the respect of their men is no small task. Active and successful participation in a college education program would most certainly help Navy petty officers gain the respect of their men. The Navy petty officer has a definite need for a real opportunity to raise the level of his educational experience.

Development of a Source of Officer Candidates.

Persons may become naval officers by: (1) Commissioning from the enlisted ranks. (2) Graduation from the U. S. Naval Academy. (3) Completion of the Naval Reserve Officer Training Corps (College Program). (4) Completing the Naval Aviation Cadet Training Program. (5) Direct commissioning. 12

Commissioning from the enlisted ranks and direct commissioning normally occur only during periods of rapid expansion, when there are insufficient inactive Reserve officers on call to fill the necessary slots. However, each class entering any one of the other three programs has its quota of enlisted men. Selection from the enlisted ranks for any one of these programs is based upon physical fitness, recommendations of commanding officers, and academic achievement. Navy line petty officers fall short only in the latter classification, thus depriving themselves of the opportunity for advancement into the officer ranks and depriving the Navy of the services, (as officers) of men who

12 U. S. Department of the Navy, United States Navy Recruitment Handbook. Washington, D. C.: Bureau of Naval Personnel, (November 1946), Brief No. 65.



have gained valuable Naval experience in the grass roots of the enlisted ranks. The number of completely qualified enlisted men available for and desirous of entry into the previously mentioned programs would be greatly increased if a formal college education program were available to all personnel throughout the Navy. The Naval Academy Preparatory School at Newport, R. I., prepares a competitively selected group of enlisted men for entry into the Naval Academy each year. The author feels that similar opportunities, on a strongly-encouraged voluntary basis, should be made available to the men throughout the Navy.

An Added Incentive for Enlisting in the Navy.

Under normal conditions of national economy and international relations, the Navy, as well as the other branches of the armed services, can be considered as a form of industry, in competition with other industries in the manpower market. That industry which offers the "most and the best", for both the present and the future, can attract the most desirable workmen. The relatively low cash pay offered to enlisted men is offset by other material and psychic values. To mention a few: free food and clothing, free medical care for self and dependents, opportunity for advancement commensurate with reasonable application and good behavior, monetary allowances for dependents, opportunity

to visit foreign lands, etc. The Navy appeals to a certain portion of the available manpower by offering prospective enlistees the opportunity to learn a trade or a skill. In light of our nation's steadily rising level of education, the Navy can appeal to another portion of the available manpower by offering a real opportunity for a man to gain a college education, or a substantial portion thereof, while serving in the Navy. While this consideration need not be considered as a primary objective of a formal college program, it would have value as a by-product.

Development and Maintenance of High Morale.

Any large organization is constantly beset with serious problems of morale and discipline unless its employees work with and for the organization, believing in what they are doing. The roots of most of these problems can be traced back to the failure to satisfy two fundamental human desires: (1) a desire for realization of the goals of the agency, and (2) a desire for a sense of participation. The satisfaction of these desires is particularly difficult in a military organization, the ultimate service of which (destruction of an enemy) is intermittent, though obvious and urgent. In times of peace, "exist and be ready" is a purpose about which it is very difficult to be dramatic and to which it is difficult to give inspirational force. The

very nature of a military organization, with its strict hierarchy and discipline, tends to prevent subordinates from having a real sense of participation. Another factor is the frequent necessity for secrecy. It is Navy policy, even in time of war, to keep men informed concerning present and future plans and operations -- so far as may be commensurate with security regulations. Easy times, however, this calls for the subordinates to exert their efforts toward achieving an immediate goal or goals about which they know practically nothing.¹³ With so many negative factors it should be evident that the building and maintaining of high morale in a military organization is a personnel problem of such magnitude as to call for the effective utilization of all positive devices that are reasonably available.

One excellent morale-building factor of proven high quality is a good off-duty education program. In the other branches of the armed forces as well as in the Navy the availability of educational opportunities proved effective in solving morale and discipline problems:

Particularly in areas where combat organizations were temporarily inactive, locally organized schools proved to be effective solutions for problems of morale and discipline and satisfying means of maintaining the active interest of military personnel. A school established in Italy

¹³ From notes on a lecture on personnel matters delivered by Dr. Harvey Innisfield to his class in Political Science 605, Ohio State University, December 6, 1950.

by a unit of the Twelfth Air Force was one of the first comprehensive schools of its type in the Mediterranean theater. It originally offered some thirty-five courses. A few classes were taught by competent teachers without texts. In other classes RAFI textbooks were used. Observers testified to the interest shown by the students and the ability of their instructors. The interest of the students in their classes was reflected by the fact that class attendance fell off less than attendance of team members in athletic games. It was further indicated by the increase in voluntary reference reading in the library. The school was useful also in that it became the nucleus of a whole network of community activity.¹⁴

The experience of the American Expeditionary Force after World War I provided valuable background for planning a sound Army education program for the post-hostilities period of World War II. Experience demonstrated amply that without an adequate substitute for military duty, administered with vigor and conviction, cases of absence without leave, desertion, insubordination, petty misdemeanors, and even serious crimes mounted with each year. This experience also showed that "busy work" was not an adequate substitute for progressive training. Forced military drill, when the reason for the drill had largely or completely disappeared, was no more than busy work, and amusement and recreation were not likely to restrain natural restlessness.

The only dependable answer was an education program that would prepare military personnel for resumption of life and work as civilians. The Army Education Program for the post-hostilities period was worked out to supply this constructive training.¹⁵

It is indeed unfortunate that the near-hysteria which accompanied demobilization almost completely destroyed,

¹⁴ Houle and others. The Armed Services and Adult Education. P. 122.

¹⁵ Houle and others. Id. III., P. 221.

among other things, the effective implementation of this well-designed program.

Accepting the value of an education program as a morale builder, let us consider the problem of motivation involved. Once again we turn to Earl J. McGrath:

What are the purposes which impel these (Navy) men to spend a large part of their leisure time in study?...The purposes of those who pursue off-duty studies can be classified in three categories. One group has an immediate or a post-war vocational objective... Another group of naval men are enrolled in educational services classes for the purpose of continuing or completing their formal schooling... A third group of leisure-time students has no purpose other than that of filling hours not occupied by military duties with some form of constructive and wholesome activity. 16

An additional factor of considerable motivating force -- one that was not present during the early years of World War II -- is the advance knowledge on the part of today's servicemen of the opportunity for formal education offered to ex-servicemen by the G. I. Bill of Rights. The Veterans Administrator sent the following telegram to Regional offices of the Veterans' Administration on July 26, 1950:

Questions have been raised concerning the rights of veterans who enter the active military or naval service to resume education and training after the statutory cut-off date. I have determined that any veteran who has initiated his course of education and training, whose conduct and progress in such course has been satisfactory, and who is prevented

16 McGrath, op. cit., pp. 23-24.

by reason of re-entrance into the active military or naval service, from receiving education or training before July 25, 1951, or the date four years subsequent to his (initial) discharge, will be permitted to resume education or training within a reasonable period following his release from active service, even though such release is subsequent to July 25, 1951. Such education and training is limited of course by the extent of the veteran's remaining entitlement and by the statutory provisions that no education or training may be afforded beyond July 25, 1956; or, in the case of a person who voluntarily enlisted under (the) provisions (of) P. L. 100, 70th Congress, the date nine years subsequent to the veteran's discharge from such enlistment.

It may be assumed that the termination date of the G.I. Bill, July 25, 1956, will be extended by Congressional action to provide opportunity for veterans now on active duty in the present emergency to complete their G. I. benefits and to provide opportunity also for those (non-veterans) in the Armed Forces. 17

The author submits that this advance knowledge of the educational opportunities available to service personnel upon discharge will strongly motivate non-veteran soldiers and sailors who are high school graduates to commence their college educations while still in the service; and that veterans who re-enter the service prior to completing their college educations will be equally motivated to continue their studies while they remain on active duty.

Another group that must be considered is that comprised of career officers and enlisted men who wish to

¹⁷ American Council on Education. "Entitlement of Veterans-Students Re-Entering Active Service," Bulletin, Higher Education and National Affairs. Emergency Supplement No. 70. October 2, 1950, p. 1.

prepare for entry into civilian life upon retirement. Being faced with the possibility of (or opportunity for) retirement at a relatively young age, many of these men are desirous of or should be motivated toward preparing themselves for active participation in a civilian occupation or profession. Although in times of peace it is quite natural that our armed forces decline in relative importance in national affairs, it is unfortunate that in times of peace the man in the street (and Congress) shows far less concern for the welfare of the peace-time service man than is deserved.

The author makes the point that the quality of educational opportunities in the Navy (armed forces) should not be permitted to fluctuate with international tension. Men who choose the Navy as a career should have available at least the same opportunities in times of peace as in times of war.

Contributing to the Over-all National Effort to Effectively Train and Utilize Manpower.

The present national manpower mobilization picture is far more complex than that which was faced at the beginning of World War II. In 1941, total war was suddenly thrust upon an apparently unsuspecting United States, and the immediate national reaction was largely military in



nature. Public opinion held that every able-bodied young man belonged in uniform, and that industry and the many other home front activities -- including educational institutions -- should get along as best they could. As we regained our national pulse after the early dark months of World War II and moved to the offensive, the national urge was to "get it over with and bring the boys home." In this present crisis, however, manpower mobilization must be viewed differently than was the case in World War II. It cannot be considered as a temporary measure -- as the most effective means to a well-defined end, the reaching of which will eliminate the need for the means, manpower mobilization. To this date we are not engaged in full-scale warfare with a major world power. Hundreds of thousands of our soldiers, sailors, and airmen now undergoing training may never be involved in actual combat. However, until the present international situation is resolved -- peacefully or otherwise -- to the satisfaction of the Western Democracies, our country wears the yoke of manpower mobilization, at least to some degree. It must be accepted as a distasteful portion of our way of life.

The Manpower Utilization Section of the Conference on Higher Education in the National Service held by the American Council on Education on October 6-7, 1950, described the total picture as follows:

...We appear to be engaged in a struggle between two opposing concepts in human organization which may well carry on for many years. This struggle may be only in part and sporadically military, although there may be the possibility of large-scale military combat, but it is certain that the struggle will take other forms. There will be a real test of our ability to maintain our economic, political, and social structures. The struggle for the role and responsibility of our nation with regard to vast areas of the world and their people may be great and may be of extreme significance in the outcome of this struggle. All of these things indicate an accelerated demand for manpower with advanced training and experience in a wide variety of fields, not only those of importance to military and technological effort.

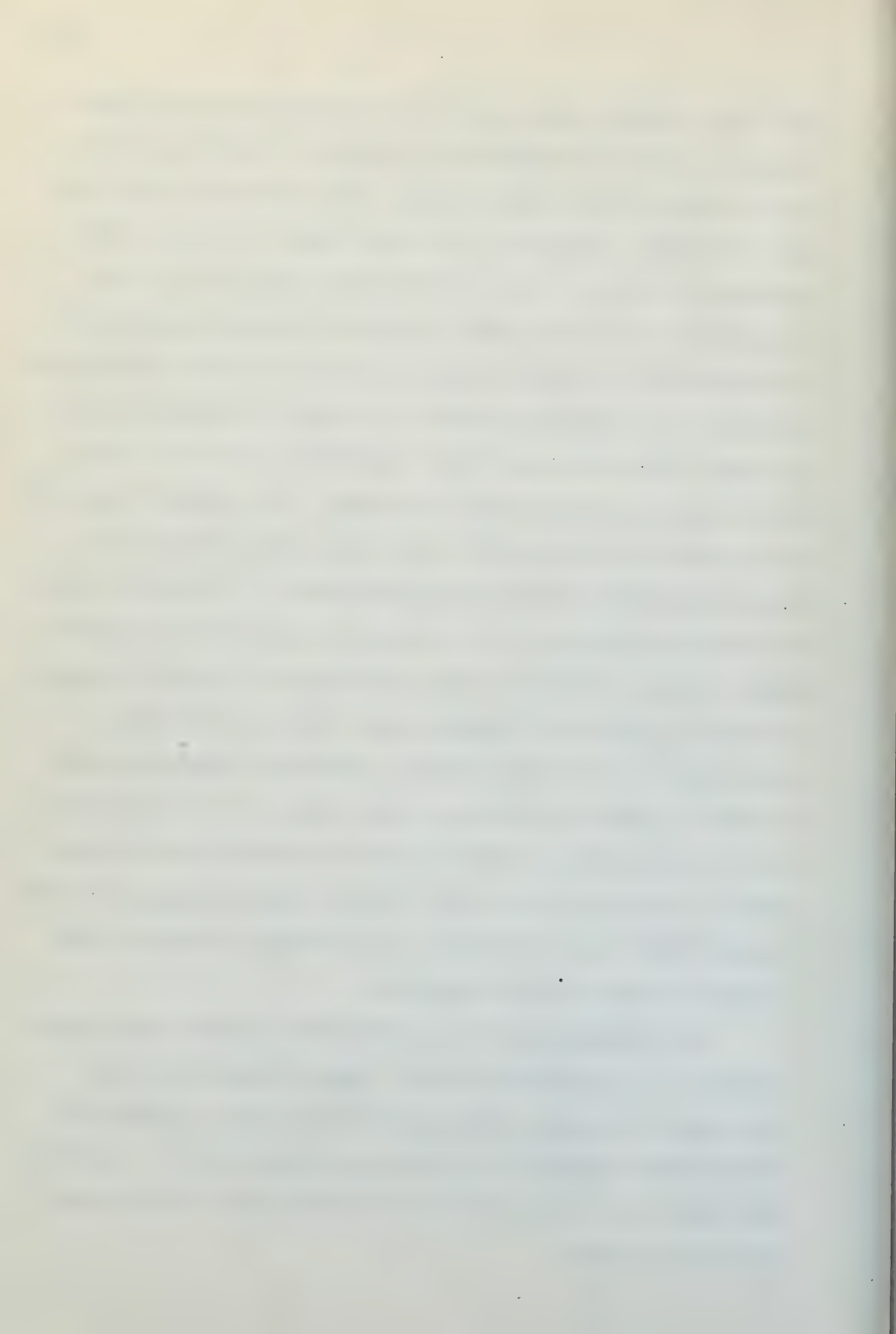
In the face of these apparently increasing and insistent demands, the need to maintain a military establishment at over the level of 3,000,000 persons presents a continuing demand for military personnel largely centered upon a narrow age group, which is for the next few years numerically considerably less than in previous years. Indeed, the calculation presented by responsible government officials seems to indicate that the maintenance of the Armed Forces at the suggested level will require a steady inflow of personnel not far different from the totality of personnel possessing necessary minimum physical qualifications.¹⁸

The total manpower picture, then, is one in which the military is a very important part -- but only a part. The relative importance of each of the various components in the picture is fluid in nature and will vary with the international political and military situations. It is essential that there be public understanding of the total situation

¹⁸ American Council on Education, "Preliminary Report of Conference on Higher Education in the National Service," Bulletin, Higher Education and National Affairs, No. 159, (October 15, 1950), p. 9.

and that policies and programs be set forth with due consideration for the problems and needs of all the participants insofar as is practicable. The implication here for the Navy (and, similarly, the other branches of the armed services) is that a tour of duty for a young man in the Navy should not be and need not be an isolated experience "in uniform," set apart from the normal time and development continuum of a citizen career as a period of wasted time, to enter which one must "drop everything" and from which one returns to resume life as normal. The primary objective of the Navy is to meet and defeat the enemy within the Navy's designated sphere of operations, but, depending upon the military exigency of the day, the Navy should be obligated to spend time and money building more useful citizens as well as effective fighting men. This means making available to the recruit expert guidance, counseling, and testing to make him (and the Navy) aware of his capacities and potentialities so that he can be utilized effectively while in the Navy and so that he can begin shaping a course through life that will lead to his being a productive and contented member of our society.

For example, let us consider the current shortage of engineers in the labor market. The following statement was issued in August, 1940, by the Empower Committee of the American Society for Engineering Education in cooperation with the Bureau of Labor Statistics and the National Research Council:

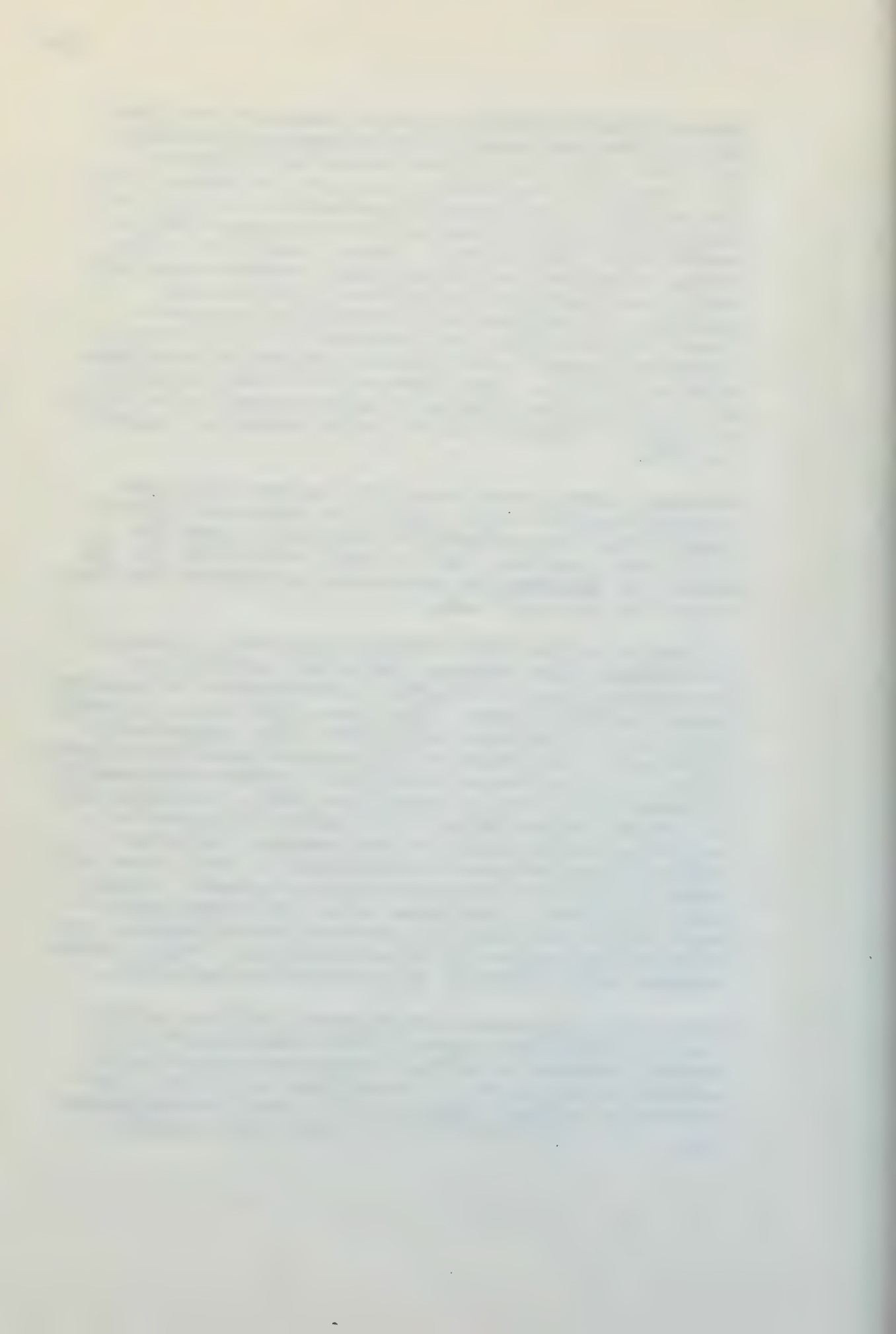


Recent reports received by the Manpower Committee of the American Society for Engineering Education show that large industries employing engineers have stepped back, during the last few weeks, into the market for engineering graduates, in spite of the large supply of engineers who entered the job market upon graduation in June. Except in a few areas, nearly all of these June graduates have already been absorbed in industry, and serious shortages of engineering personnel in the near future are now indicated because of the expected increased demand for engineers created by mobilization activities. The Secretary of Labor included all the principal fields of engineering in the list of critical occupations which he issued on August 3, 1950.

Although there is an immediate concern that the present supply of well qualified engineers may be inadequate, the outlook for the years ahead is still more serious, due to sharp reductions in the number of engineering graduates in prospect for the next five years or more.

Estimates of the ASSE Manpower Committee, based on enrollments last spring, indicated for 1951 a graduating class of 35,000, a decrease of 30 percent below the 1950 class. The class graduating in 1952, according to the same estimates, will number only 25,000, or a decrease of 50 percent below this year's class. The estimate indicates a further decrease to a graduating class of 20,000 in 1953, a decrease of 60 percent below 1950. This number is below the annual estimate of needs of the economy for actual engineering graduates as estimated by the Bureau of Labor Statistics for peacetime employment. Since many engineering graduates enter other employment where their training is preferred by employers, the expected shortage will be accentuated. Mobilization demands will aggravate this situation seriously.

Trends in high school enrollments indicate still further reductions beyond 1953 unless there is a marked increase in either the percentage of high school graduates who go to college or in the percentage of college freshmen who enroll in engineering. Present indications are that the entering



class in engineering this Fall will be much smaller than was the class which entered last Fall. 19

With this situation in mind, Navy vocational counselors and educational advisors can (1) determine which of their advisees show an aptitude for engineering, (2) brief them on the situation, emphasizing the bright employment prospects in the engineering field, (3) channel their educational efforts, suggesting possible curricula to be followed, and (4) recommend specific Navy billets for duty assignments that would, firstly, benefit the service through utilizing the aptitudes shown, and, secondly, benefit the individual by affording training and experience in a field closely related to that into which the individual is planning to enter upon return to civilian life. Any expenditures of time, effort, and money necessary for full implementation of such an employment counseling and assignment program, and for a concurrent education program, would be justifiable for the following reasons: (1) the Navy would benefit through increased morale and through better on-the-job performance; (2) the individual would benefit through accepting a tour of duty in the Navy as a springboard to bigger and better things in life and not as an unwelcome waste of personal time; and (3) the nation would benefit

19 American Council on Education. "Shortage of Engineers Foreseen," Bulletin, Higher Education and National Affairs, No. 100, (August 25, 1950), pp. C-7.

through the more effective and meaningful utilization and training of manpower.

The author further advocates that the Navy become a major employment and counseling institution for the youth of America and recommends that capable naval personnel be advised to prepare for entry into civilian life in lieu of making a career in the Navy. However, the author does call for a practical recognition on the part of the top Navy commands of the manpower utilization and training situation as a whole, and of the tremendous opportunity the Navy has to contribute to the over-all effort by offering each man sound vocational guidance and a real opportunity for a formal education.

By way of summary, the following purposes would be served by a service-wide education program on the college level:

1. Continued indoctrination in American ideals and issues in world politics.
2. Improvement of in-service efficiency of officers and men.
3. Implementation of the College Training Program for officers who have been integrated into the regular Navy from the reserve or from temporary duty.
4. Balancing of the educational levels of Navy petty officers with their levels of technical training.
5. Development of a source of officer candidates.

6. Serving as an added incentive for enlisting in the Navy.
7. Development and maintenance of high morale.
8. Contributing to the over-all national effort to effectively train and utilize manpower.

CHAPTER III

COMMAND SUPPORT

Before appraising the opportunities for higher education that exist in the Navy today and before discussing the various aspects of a college program for the Navy, the broad question of command support as it applies to education in the Navy should be considered. As dealt with here, command support may be defined as the sum total of (1) appreciation of the broad purposes of education for naval personnel, (2) encouragement to participate in educational programs, and (3) material support for educational programs.

Adult education cannot be successful unless those in charge of the total organization within which it works are impressed with its role. Always, throughout the Army and Navy experience, the quality of the off-duty program was in part a reflection of the interest and cooperation of the higher authorities in the chain of command. An educational officer could sometimes surmount many of the obstacles placed in his way by his commandant, but his program was always made more difficult by them. Civilian adult educators will recognize certain similarities between their own experience and that of the Army and Navy. Often, in civilian life, there exists the problem of working with a superior -- the president of the university, the corporation, or the union -- who does not fully understand adult education. The solution of the difficulty appears to be the same in both cases -- try to convince the superior officer of the value of the program in question. Educational officers who tried to circumvent their commanding officers -- like their civilian equivalents -- were sometimes successful but more frequently came to grief.¹

¹ Cyril A. Wolfe, Gilbert W. Furr, Thomas H. Hamilton, and John W. Hale. The Armed Services and Adult Education. For the Commission on Implications of Armed Services Educational Programs. Washington: American Council on Education, 1947, p. v.

The implication here is that even though an educational program may be well planned and organized, and even though the instructors and administrators involved may be of high quality, the program cannot accomplish its objectives unless it has vigorous and sincere command support. Each commanding officer has the power and influence to "make or break" an educational program in his command. Every commanding officer -- by virtue of his having been qualified for selection to a Navy command -- should be qualified to weigh the pros and cons of an educational program and to determine the degree of implementation and support he desires. Hence, it is reasonable to assume that the varying degrees of excellence of educational programs in different Navy commands are caused, at least in part, by the varying amounts of thought and consideration given to such programs by the different commanding officers. Excellent educational programs are the result of commanding officers having carefully considered and accepted the objectives and value of education for Navy personnel. However, poor educational programs are not necessarily the result of careful consideration of and partial or full rejection of these objectives and values, but may be the result of the commanding officers' not having given these objectives and values the careful thought and consideration they deserve.

When a commanding officer is presented by his Information and Education Officer with a proposal for a vigorous educational program, he must consider what value it will be in helping the officers and men of his command, as individuals and as a team, to perform more effectively their assigned duties. A good place for him to start is with this excerpt from the Navy's down-to-earth pamphlet on education, "Education Sense":

<u>PAY GRADE</u>	<u>HIGH SCHOOL GRADUATE</u>	
1	74%	
2	68%	
3	56%	Notice that the higher the pay grade the greater the <u>proportion</u> of high school graduates
4	44%	
5	34%	
6	30%	

This does not mean that 74% of all enlisted men with a high school education reach pay grade 1. It does mean that among those who reach pay grade 1, 74% of them are high school graduates. If education increases the opportunity for promotion, and if opportunity for promotion is accepted as an important criterion for high morale, the commanding officer can see one immediate and tangible value for an education program.

² Bureau of Naval Personnel, Education Sense. Prepared for the Armed Forces. Washington D. C. Government Printing Office, 1960, p. 16.

It is a truism to say that the great majority of acts requiring disciplinary action occur during the leisure hours of Navy personnel. Punitive action, in many cases, is in the form of deprivation of a number of leisure hours, through either restriction or confinement. Preventive action, in all cases, can be in the form of having available during off-duty leisure hours non-trouble-breeding activities in which the men want to take part. An educational program can be such an activity.

A commanding officer, in the normal execution of his office, must make selections and recommendations from among his officers and men for many purposes: reports of fitness, recommendations for advanced training, selection for promotion or transfer, etc. One of the personal traits by which men are judged and rated is that of initiative. Another is ambition. The commanding officer should welcome a device which will aid him in determining which of those persons in his command have the personal ambition to better themselves and the initiative to do something about it. An off-duty educational program can be such a device. The man who does not take advantage of leisure time educational opportunities does not necessarily evidence a lack of personal ambition and initiative, but the man who does take part in an off-duty educational program is indicating that he possesses these traits.



Such organization, be it a Navy command or a shoe factory in St. Louis, has within it informal organizations. These informal organizations are normally social in nature, being based on off-duty social activities. They are recognized by experts in the field of personnel management as one of the most powerful forces in labor-management relations.³ Such organizations among the personnel in a Navy command can conceivably be based upon such things as mutual rank or rate, living in the same neighborhood or bunking in the same compartment, or frequenting the same bars while on liberty. Depending upon their respective bases, these associations can be either desirable or undesirable from the commanding officer's viewpoint. An informal organization which has its roots in mutual participation is an activity as wholesome and beneficial as an educational program should be welcomed by any commanding officer.

Thus, within the narrow perspective established for a commanding officer who is reviewing a proposed educational program for his command, there are (at least) these four concrete values: (1) An education program can increase the opportunity for promotion and, consequently, aid in maintaining and maintaining high morale. (2) An education program can serve as a means to decrease off-duty misdeeds by

³ From notes on a lecture on personnel organizations delivered by Dr. Michael J. Jucius in his class in Business Organization and Personnel Management, Ohio State University, October 9, 1960.

offering Navy personnel the opportunity to participate in a non-trouble-making off-duty activity. (3) An education program can serve as a tool for determining, in a positive manner, those persons who possess initiative and personal ambition. (4) An education program can serve as the basis for an informal organization that would be welcome within a Navy command.

Having accepted a proposed educational program for what it has to offer to the success of his command, the commanding officer cannot hope to realize the program's values by merely authorizing that the program be placed in effect.

The authors of the study wish to record.... their personal judgment that, if there had been more enthusiastic encouragement and material support both outside and inside the Armed Services, the off-duty (educational) programs might have reached larger numbers of interested service personnel, and their broad objectives might have been more fully realized. Late in the war, increasing support was given -- the change being particularly notable in the Navy -- but for much of the war, the failure of some echelons of command to appreciate fully the broad purposes of the off-duty programs meant that inadequate attention was directed to the implementation of the objectives of the programs.⁴

An adult educational program will succeed only when there is inspired and active leadership. It must be remembered that educational activities are not as yet part of the normal life of all adults. In the absence of interested leadership, groups do not ordinarily grow up or, if they do, they do not

⁴ Houle and others, The Armed Services and Adult Education, p. vii.

persist and broaden the scope of their interestsIt would appear that, in both military and civilian realities, adult education cannot succeed without administrators who are in part leaders and in part promoters in the best sense of that term. ⁵

Even though the relationship of an education program to official duty functions is collateral, voluntary, and off-duty in nature, it cannot succeed and will offer the command no appreciable benefits unless the commanding officer himself shows a noticeable interest in it and lends it his personal support and leadership.

All Navy commanding officers need to give serious thought and consideration to the values that education has to offer to the operating efficiency of the Navy, to the officers and men as individuals, and to our democratic nation.

⁵ Id., p. 137.

CHAPTER IV

THE DEVELOPMENT OF EDUCATIONAL OPPORTUNITIES IN THE NAVY

At this point in the discussion the writer wishes to establish clearly the scope of this paper. It is realized that many Navy people are not high school graduates and that some are even illiterate. The general area of higher education cannot be arbitrarily divorced from education on the high school and lower levels -- they are located on a continuum of educational experience and achievement. However, this paper is concerned with education and educational opportunities for the Navy man who is a high school graduate or who can qualify for training at the college level.

Let us state again the problem being considered: How can the Navy best use the facilities, personnel, and services of the nation's colleges and universities in establishing a service-wide education program on the college level and in maintaining such a program so that its objectives may be achieved with reasonable success? In the preceding chapters the author discussed the various needs for educational opportunities for Navy personnel, the fulfillment of which can be considered as the objectives of an educational program. Some of these opportunities may be realized through facilities for higher education that exist in the Navy today. The author will take the following general

approach: (1) A report of what exists today, (2) An evaluation of what exists today in the light of the previous stated needs, and (3) Recommendations for changes or additions.

The Development of the Navy Information and Education Program

Prior to the second World War the Navy had taken no official steps to establish an off-duty educational program. However, throughout the Navy various commanding officers and chaplains were encouraging their men to use commercial correspondence facilities, to make use of local civilian educational opportunities, or to pursue planned reading programs. These cases were the exception to the rule.

In February 1941, President Roosevelt directed that the Army and Navy join to form the Joint Army and Navy Committee on Welfare and Recreation. The work of the Committee led to the preparation of the Navy Voluntary Wartime Education Program. This tentative program, to be administered by the Officer Training Division of the Bureau of Naval Personnel, was announced on May 27, 1942, in a memorandum listing the five following objectives:

1. Improvement of in-service efficiency of officers and men.
2. Training to supplement skill in Navy rating to prepare enrollees for related work in civilian life.

3. Continued indoctrination in war issues and American ideals.
4. Preparation for civilian life after the war.
5. Improvement of morale.

In October 1941, the first full-bodied implementation of this program occurred -- at Guantanamo Bay, Cuba. This naval station offered a very receptive situation -- a large number of men was normally engaged in combat and having few facilities for off-duty activities. A class in Spanish was established and 275 applications were received the first day. Classes in blue print reading, shorthand, Morse code, and English were soon added to the curriculum. Texts were requisitioned from the Bureau of Naval Personnel, which purchased them in the commercial field. Classes usually met five nights a week for hourly sessions. ¹

This experiment proved so successful that the commanding officer ordered the project in a letter to the Chief of Naval Personnel, who established the War Education Unit, which assigned educational officers to other military areas.

In December 1941, the War Department authorized the establishment of an Army Institute, the purpose of which was to provide a supervised school which would make available educational opportunities for enlisted men and women of the Army. Headquarters were established at Madison,

¹ Cyril G. Houlo, Robert W. Hays, Thomas E. Hamilton, and John E. Yale. The Armed Services and Adult Education. For the Commission on Implications of Armed Services Educational Programs. Washington: American Council on Education, 1947. pp. 31-32.

Wisconsin, and the school began operation on April 1, 1942 offering 64 courses at the secondary and junior college levels. Also, contracts were negotiated with representative accredited colleges and universities to offer correspondence courses through extension divisions of these institutions to Army enlisted men and women. The Secretary of the Navy soon expressed interest in the program and suggested Navy participation. In September 1942, the Secretary of War made the Services of the Institute available to the Navy. Soon thereafter, the school was redesignated the "United States Armed Forces Institute," commonly referred to as USAFI.²

Commissioned officers of all the armed forces became eligible for participation in July 1942, and by 1943 the program had become so successful that it was continued as a regular establishment of the peacetime services.

In January 1943, a War Education Section was established within the Training Division of the Bureau of Naval Personnel. The name was soon changed to Educational Services Section, and it was this organization that was officially charged with developing and coordinating the Navy's off-duty educational program. The establishing letter stated that the Bureau of Naval Personnel "is expanding and developing opportunities for voluntary in-service education of

² The United States Armed Forces Institute, Calendar, Fifth Edition. U. S. Government Printing Office, Washington, 1943, p. 3.

Navy personnel, which action is of particular interest to everyone in the Navy who has a real desire to continue his education when the war is over and wishes to improve his position for obtaining employment upon discharge. Such a program was the express desire of the President when he approved the 16-19 year draft law.³

When the war ended in August 1945, the Navy was contemplating a great expansion of voluntary education opportunities by the establishment of additional Educational Services billets at naval stations with 2,000 or more personnel and by planning to create similar billets aboard battleships and aircraft carriers. While fractional demobilization prevented continuing expansion, Educational Services Officers were placed aboard the battleships IOWA, NEW JERSEY, and SOUTH DAKOTA, and aboard the battle cruisers ALABAMA and GUAM.

The official letter concerning the expansion of the Educational Services Program was released on August 11, 1945. The last paragraph of the letter set forth the scope of the educational function:

...The educational function is to make available at high school, technical school, and college levels, three methods of study: (a) Volunteer classes in subjects of interest to personnel taught by volunteer

³ U. S. Navy Department, Bureau of Naval Personnel. Circular Letter No. 15-43, February 3, 1943.

instructors. (b) Correspondence courses available through enrollment in the United States Armed Forces Institute (USAFI), including courses from 85 cooperating colleges and universities. (c) Self-study through the local issuance of books to interested individuals or by enrollment with the United States Armed Forces Institute. Fundamental to the educational aspect of the program are: (a) Counseling, directed toward assisting Navy personnel to formulate their educational and vocational plans and to undertake steps in attaining them; (b) Accreditation...whereby naval personnel are assisted in making application to civilian schools and agencies for credit for their military experience and training. ⁴

In spite of many difficulties the Navy's Educational Services Program was extensive in scope. The following paragraphs indicate the scope and diversity of the off-duty programs:

At the recruit training center at Parris, N. Y., 164 courses were being offered in the summer of 1945. Of the 312 men enrolled in the formal evening classes at Mare Island Navy Yard in July and August of 1945, 134 obtained high school credits. At the same station in September, formal graduation exercises were conducted at which 87 students were awarded high school diplomas. In addition, one man obtained his college degree by completion of requisite credits through USAFI correspondence courses. Some of the centers outside of the continental limits of the United States conducted educational programs which would have taxed the facilities of a large university. In August 1945, 9,446 men were under instruction in the 14th Naval District alone. During July and August of 1945, 94,016 texts were distributed to the 14th Naval District, to Fleet Marine Forces, and to ships, while some were retained for use at the Pearl Harbor center. Although the program of

⁴ U. S. Department of the Navy, Bureau of Naval Personnel, Circular Letter No. 236-45, August 11, 1945.

The 14th Naval District had been in existence less than two years, cumulative figures show that about 60,000 officers and men had attended off-duty classes at high school and college levels, while 25,000 had enrolled in correspondence courses and 65,000 had received counseling service.

Pearl Harbor was the largest of the overseas centers operated by the Educational Services Section, but as the following figures indicate, very extensive operations were undertaken at other local points in the advanced areas:

Pearl Harbor Center

Total number of classes to November 1, 1945..	806
Class enrollment	14,375

Saipan

Total number of classes to January 1, 1946...	344
Class enrollment	4,015

Midway Island

Total number of classes to November 1, 1945..	343
Class enrollment	4,747

Advanced Base (Seaside) Depot - Pearl Harbor

Total number of classes to January 1, 1946...	131
Class enrollment	3,532

Naval Air Station, Honolulu, Oahu, Territory of Hawaii

Total number of classes to November 1, 1945..	113
Class enrollment	3,731

Naval Operating Base, Guam

Total number of classes to November 1, 1945..	107
Class enrollment	2,324

It is not possible to estimate the extent of the educational facilities made available through collateral duty KMO's, since they did not submit official reports, but the scope of the program was certainly greatly extended by this means. By the end of 1945, approximately 110 centers had been established in the 14th Naval District alone at activities where no specially trained KMO's were stationed. These programs were handled on a collateral duty basis by educational officers, personnel officers, chaplains, and training officers. With the exception of a few large ships,

the Educational Services Program was entirely entrusted to the ship's functioning on a collateral basis. Aboard the U. S. S. Albatross, for instance, the Chief Quartermaster took over this role. With a ship's company of 800, personnel were enrolled in classes as follows, in the summer of 1944:

CLASSES	ENROLLMENT
English	14
Celestial navigation	26
Seamanship	70
Business law	70
French	17
Algebra	11
Plane geometry	7
Basic mathematics	19
Total	234

It was the policy of the Educational Services Section to encourage Educational Services Officers to adjust to the local situation. The center at Alak had an excellent course on the geology of the Aleutians. In Trinidad, a course was organized in citrus fruit growing. At the air station at Fanning, various authorities from the region were brought to the station to give lectures on the culture and problems of the Hawaiian Islands. At Pearl Harbor, an enlisted man who was a well-known professor of economics at a leading university gave a course in the economics of warfare.

...Informally, many of these Educational Services Centers were given names by the men themselves, which emphasized the regional aspect of the program. Some of these designations were: University of Midway, College of the Admiralties (Marine), College of the Aleutians (with branches at the various bases in the Aleutian chain), Trinidad Tech, University of New Hebrides (Torres Strait), Japan University, Navyac U. (Pearl Harbor), Capellan University (Philippine Islands), and U.S.-S. (Chamorro). 5

5 Boule and others, op. cit., pp. 36-38.

As previously pointed out, a decline in the quality and scope of the armed forces educational program was a natural consequence of large scale demobilization. Experienced educators and educational administrators returned to civilian life; hundreds of ships and stations were decommissioned with resultant wastage in personnel assignment. Less concern was evidenced regarding the educational opportunities for the peacetime sailors, soldiers, and airmen than for the men in uniform during the war.

The Educational Services Division did not die out, however. USAFI naturally experienced a severe drop in business, but it remains in operation in all respects, staffed entirely by competent civilian personnel. The number of colleges and universities under contract for correspondence courses has dropped from 84 to 44, but the coverage of course subjects remains very comprehensive. The most outstanding single reason for the decline in the quality of the Educational Services Program was the elimination of the billets in the field and the consequent removal of the program from the limelight it enjoyed during and shortly after the war. Educational Services duties in the field now are entirely collateral in nature, that is, officers assigned to such duties have other primary responsibilities which must come first.

On September 22, 1950, the Bureau of Naval Personnel issued Circular Letter No. 154-50, which changed the name of "Educational Services" to "Information and Education," and which assembled in one directive all effective instructions and information concerning this program. The portion referring to education is set forth below:

EDUCATION

5. The voluntary academic and vocational educational activity conducted as a part of the I & E Program will be termed the Navy Voluntary Education Program. The objectives of this program are:

a. To provide whatever supplementary education is necessary for Navy personnel to perform their assigned duties effectively.

b. To assist Navy personnel to meet the educational requirements for career advancement.

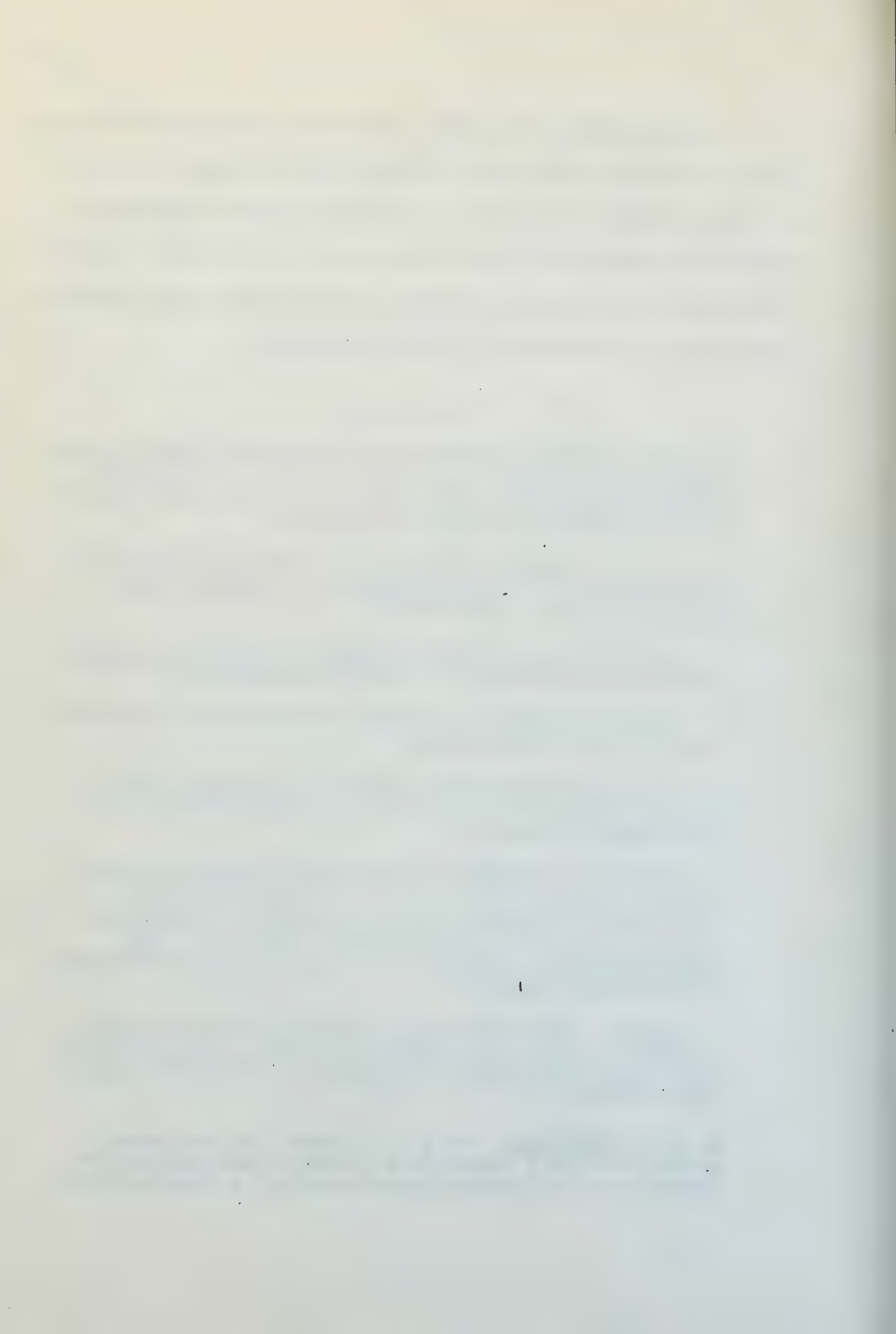
c. To provide continuing educational opportunities for Navy personnel.

d. To assist Navy personnel to employ their leisure time profitably and to satisfy their intellectual interests.

6. Important elements in the Navy Voluntary Educational Program are NAVP, I & E Centers, NAVP Registration Centers, Testing Centers, Voluntary Classes, Basic and Intermediate Education, and Accreditation. These various elements are discussed individually below.

7. NAVP. The nature and activity of this Agency, the scope of the Navy's Voluntary Education Program, are fully described in reference 1 (NAVP Catalog, Fifth Edition).

8. I & E Centers. An I & E Center is the place, large or small, where an individual may obtain informational and educational services and materials;



its administration is the responsibility of the I & H Officer. Where practicable the center should provide space for reading, study, and counseling. It may include a USAPF Register-Write Center and a Testing Center. It is recommended that the I & H Center be located in close proximity to the unit library.

9. USAPF Registration Centers and Testing Centers.
See Section VII of Reference 1.

10. Classes. See Section VI of Reference 1. When military instructors cannot be obtained the command may be authorized to employ part-time civilian instructors for the class instruction of military officers and men in any self-study or correspondence course offered by USAPF. There must be a minimum of 15 applicants on active duty in the Armed Forces for each class. Students should enroll with USAPF. Dependents of military personnel may attend classes taught by civilian instructors on foreign stations, but such classes may not be established or continued solely for the instruction of dependents when the cost of instruction is paid wholly or in part from the appropriation "Navy Personnel, General Expenses." Commanding officers wishing to employ civilian instructors will furnish the following information to the Chief of Naval Personnel:

- a. Subject to be studied (USAPF title and number).
- b. Number of applicants on active duty in the Armed Forces.
- c. Planned length of course in hours.
- d. Estimated cost per hour of instruction.
- e. Total cost of instruction and materials.
- f. Name of the instructor or name of the educational organization which will supply instructor services.

Upon receipt of satisfactory request the Bureau will authorize the Commanding Officer to proceed with the execution of a contract to be negotiated and paid by the local supply officer. Funds will be allotted by Bureaus. Personnel on active duty in the Armed Services may not be employed as paid instructors. The average hourly cost of instruction at the high school or junior college level throughout the United States is about \$3.75. All organized classes will be reported on the I & H quarterly report... Classes which are

reduced by attrition may remain active as long as the number of military students is considered by the Commanding Officer to justify the continued expenditure of appropriated funds. Units or squadrons which are based in one locality for a sufficient length of time may arrange for the instruction of their personnel through the local shore activity.

11. Basic Education. It is essential to military efficiency and to military training that each person in the Navy be able to read, write, and do simple computations. Commanding Officers shall arrange for the effective instruction of all personnel of their commands who by tests or records have not completed the fourth grade or its equivalent, or who have a score of less than 33 on the Navy GCT (General Classification Test -- a general intelligence test included in the Navy Test Battery given to all Navy recruits). Materials for instruction are available from BuPers. These materials include texts, instructors' manuals, course outlines, and tests. The following are especially recommended:

- NavyPers 14114 - Navy Life - Book I
- NavyPers 14156 - Navy Life - Book II
- NavyPers 14180 - Navy Life Reader - Book I
- NavyPers 14181 - Navy Life Reader - Book II
- NavyPers 14194 - Instructors' Manual - Teaching Suggestions
- NavyPers 14197 - Navy Life Arithmetic

Where some question exists as to the educational level of an individual or where it may be desirable to present proof of a deficiency it is suggested that the Navy Literacy Test Form I-1, NavyPers 14600, be administered. A raw score of less than 40 on this test is considered to indicate a need for training in reading. Achievement after instruction may be measured by the use of the Navy Reading Achievement Examination, Form I or II, NavyPers 14736 or NavyPers 14739. Instructions for this test are contained in the Manual for Administration and Scoring of the Reading Achievement Examination, NavyPers 14737. An appropriate notation should be made in the service record of individuals who have scores of less than 33 on the GCT and who demonstrate by test or attain through instruction a satisfactory basic education.

12. Intermediate Education (Grades 8-9). Education manuals for courses in grades 8-9 are listed in reference 1. Tests for placement and achievement in these grades (USAFI Basic and Intermediate Achievement Tests) are available from Navy.

13. Accreditation.

a. See Chapter 8 of reference 1 (Educational Services Manual, Navy 160633). It should be noted that USAFI Form 47 has been replaced by 10 Forms 295 and 296, which will be found valuable in communicating with civilian institutions concerning the evaluation of in-service training and education. These forms include full information for their preparation and use.

b. For in-service purposes only, the Navy accepts successful completion of USAFI tests as follows:

<u>Test:</u>	<u>Accepted by Navy as:</u>
GED (General Educational Development) Tests, high school level.	Equivalent to high school graduation.
GED Tests, college level.	Completion of first year only of a standard college course.
Educational Qualification Test EQL.	Completion of first two years of a standard college course.
End-of-Course Test and Subject Examination.	Equivalent to completion of the corresponding high school or college course, for the amount of credit recommended by the Commission on Accreditation.

Minimum Standard Scores

High School Level Tests

55 or above on each of the five tests or an average of 45 or above on the five tests of the battery.



College Level CCB:

Part I - 55; II - 60; III - 61;
IV - 57.

Educational Qualification Test XXI:

Passing score on this test is not disclosed.

Availability. The High School and College Level CCB Tests may be applied for individually using USN Form 170, or taken at a Testing Center. The Educational Qualification Test XXI must be applied for individually.

Additional Information. USAPF will not report High school level CCB Test scores to any civilian agency until the examinee has reached his 20th birthday unless the agency has requested the report or unless USAPF has on record a statement from the agency that it will accept results at an earlier age. Results of the Educational Qualification Test XXI will in no case be furnished to a civilian institution for any purpose. ⁶

On November 15, 1960, the Bureau of Naval Personnel issued Circular Letter No. 170-60, which authorized partial payment of tuition for off-duty courses taken by Navy personnel at civilian educational institutions:

1. Effective upon receipt of an allotment of funds for the purpose, district and river command commanders and force commanders are authorized to contract for the partial payment of tuition for voluntary, off-duty courses taken by naval personnel, with the commanding officer's approval, at accredited colleges, universities, and junior colleges. These funds may be used also for the payment of tuition costs of high school courses in those cases where such courses are not provided free of charge.

⁶ U.S. Department of the Navy. Bureau of Naval Personnel Circular Letter No. 150-60, Information and Education Program, Navy Department Bulletin, September 30, 1960.



2. ELIGIBILITY REQUIREMENTS.

In order to be eligible, candidates must be personnel of the Regular Navy or Reserve personnel on continuous active duty. Enlisted personnel of the Regular Navy must have at least one year of obligated service remaining upon enrollment. In any case, an individual will be authorized to enroll under the provisions of this letter only when his remaining period of service at his present station is such that he can reasonably be expected to be able to complete the course or courses for which funds are requested.

3. ACCREDITATION.

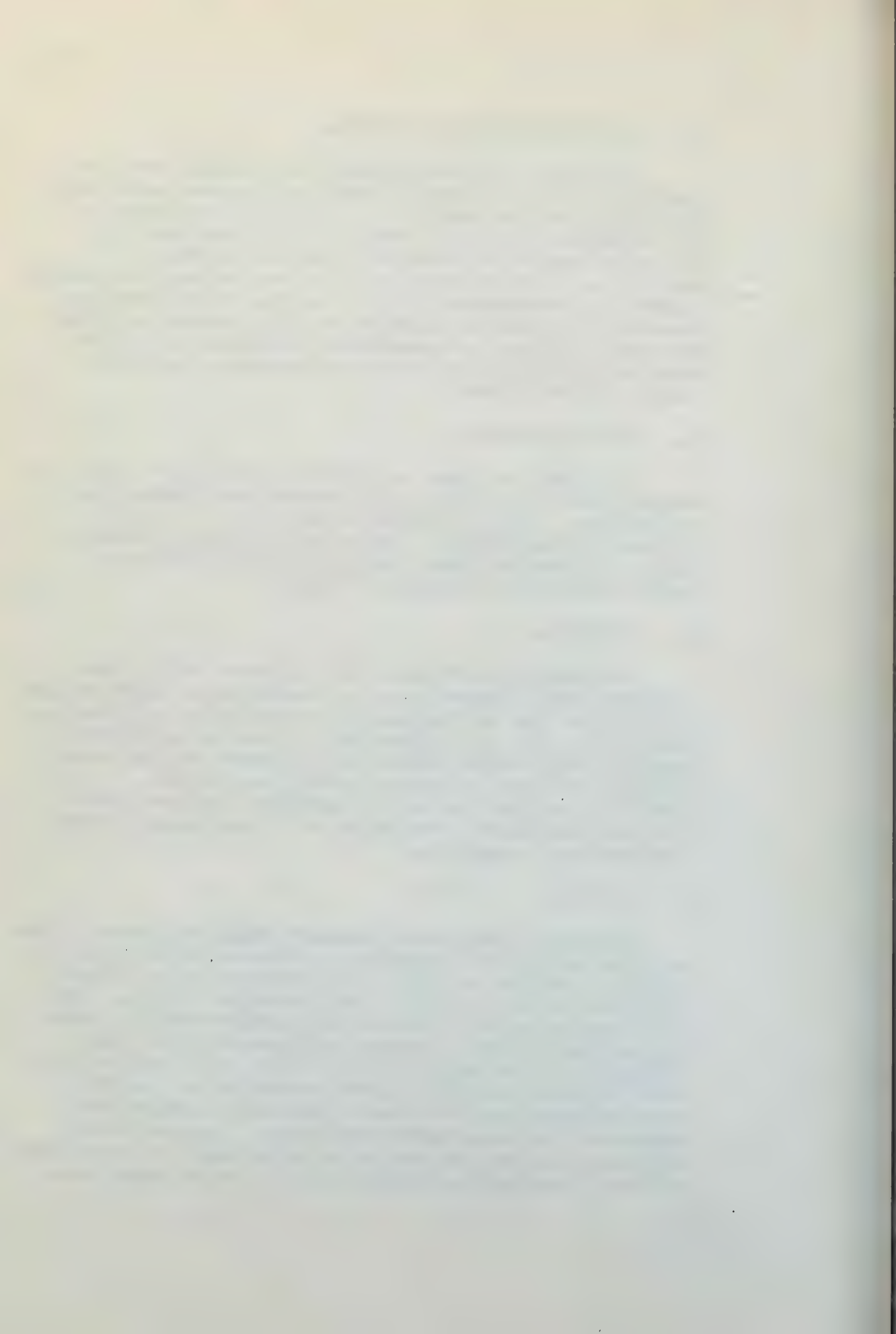
The institutions considered accredited will be those listed in Part I of "Accredited Higher Institutions, 1944," Bulletin 1944, No. 8, U. S. Office of Education. Copies of this publication may be requested from the appropriate District Publications and Printing Office.

4. COURSES.

Commanding officers will approve only those courses which contribute to the improved performance of duty or the professional capabilities of the individual. The justification of the expenditure of appropriated funds should be apparent to the commanding officer before approval is granted. At no time will an individual be enrolled in more than two courses under provisions of this letter during a semester or quarter.

5. FUNDS.

Tuition assistance granted under the provisions of this letter will amount to three-quarters of the tuition cost up to \$7.50 per semester hour (\$5.00 per quarter hour, \$22.50 per Carnegie unit). All other costs of any nature whatsoever must be borne by the individual. Initial allocations for this purpose will be made automatically to districts and river commandants and force commandants, who will grant allocations of these funds upon individual requests from commanding officers. Requests for allotment increases should be addressed to the Chief of Naval Personnel (Pers-1113) for consideration.



Such refunds as may be paid in accordance with the policy of the individual institutions concerned will be returned to the Navy and to the individual in the same ratio in which the tuition cost was originally divided.

6. PROCEDURES.

a. The individual will confer with his I & N Officer or other educational counselor concerning a course or courses suited to his needs, qualifications, and educational program.

b. The individual will then apply for admission to the educational institution, or request a statement that he will be accepted.

c. Upon receipt of indication from the institution that he will be admitted, the individual will submit a request for approval of funds... to the commanding officer.

d. The commanding officer will in turn request the necessary allocation of funds from the appropriate command....

e. The approved request for funds...will be forwarded to the institution with copies to the Chief of Naval Personnel (Pers C-111B), the commanding officer, and the individual.

7. No payments under this program will be made for courses which are already underway by the time this letter becomes effective, or for courses taken at any time in the past. ⁷

Opportunities for Higher Education

Summarizing the opportunities for higher education that now exist in the Navy, we find the following:

⁷ U. S. Department of the Navy. Bureau of Naval Personnel Circular Letter No. 170-50. Partial Payment for Off-Duty Courses Taken by Naval Personnel at Accredited Civilian Educational Institutions. Navy Department Bulletin, 20 November 1950.

A. Correspondence courses.

1. USMT: college level correspondence courses.
2. Correspondence courses offered by 44 cooperating colleges and universities through USMT.

B. Spary study courses, utilizing USMT instructional materials and tests when available and utilizing Navy instructors when available. Navy funds are available to contract for a civilian instructor when needed by a class of 15 or more.

C. Enrollment in a civilian institution for courses pertaining to an individual's Navy vocation, with three-fourths of the tuition being paid by Navy funds.

CHAPTER V

AN EVALUATION OF OPPORTUNITIES FOR HIGHER EDUCATION IN THE NAVY

Opportunities for higher education in the Navy do exist to a very measurable degree. However, they are carried in a program that was created during a world war and geared to a Navy that was the product of full manpower mobilization in the early 1940's. Let us now evaluate this program in terms of our present Navy and in terms of our present manpower mobilization, which can be expected to prevail for a number of years to come.

Off-Duty Classes at Navy Activities

Perhaps the sharpest point of difference between the situation that existed when the Navy's education program came into being and the situation of today is related to the qualifications of the in-service personnel involved as administrators and instructors. The degree of manpower mobilization that existed when the Educational Services Program was borning found thousands of professional educators and educational administrators in uniform. The following passage indicates the types of officers which were available when the first group of Educational Services Officers were selected and indoctrinated:

Before selecting the (first) one hundred and fifty officers to be placed in charge of the program at the various stations and bases, the records of over a thousand men were examined. They were drawn almost exclusively from administrative or teaching positions in secondary schools and colleges. Of these, 24 percent held the degree of Doctor of Philosophy and 50 percent the Master's degree from recognized graduate schools. Others have professional degrees in specialized fields, such as engineering and law. Almost all of them have had extensive teaching experience, the average for the group being ten and a half years. Since the duties of Educational Services Officers are primarily administrative, previous experience as a dean, school superintendent, or other administrative officer was given considerable weight in the selection of these officers. In intelligence, education, and experience, Educational Services Officers compare favorably with the faculty members of the average college. ¹

The situation involving instructors in the various off-duty classes was similar in nature:

DAVIS UNIVERSITY
Naval Base, Manila, P. I.

Classes began in October, 1945. Reports up to March 1, 1946, show that 26 officers, 3 enlisted men, and 1 civilian taught 106 classes in 76 different subjects, including high school and college mathematics, physics, and in English; French, Spanish, and Italian; business, training, and technical courses. Of the instructors, 10 officers and 1 enlisted man had M. A. degrees, 7 officers and 1 enlisted had B. A. degrees, 4 officers had B. A. degrees, 2 officers had B. S. degrees, 1 officer had an LL.B. degree, 1 enlisted

¹ Earl J. McGrath, "Navy off-Duty Education and Post-War Educational Re-Adjustment," Harvard Educational Review, Vol. XIV, March 1944, pp. 61-124.

man had a Ph. D. degree. Also 1 officer had a B.B.S. degree and an M.B. degree; 1 officer had a O. E. degree; and 12 of the 34 instructors had previous teaching experience totaling 91 years. The enrollment in these classes totaled 1,157 officers and enlisted men. ²

It may be assumed that almost all of these well-qualified and experienced educators and educational administrators left the service during the demobilizing period following the end of hostilities to pursue their chosen professions and occupations in civilian life. The upper age limit of those eligible for the military draft during the last war (35 years at its peak) was sufficiently high to press into service, either voluntarily or through the draft, many experienced educators and educational administrators. During total war, the great majority of such persons will not enter the military services during the current world crisis. The present upper age limit of the draft (30 years) is too low to include many of these persons, and the great majority of Reserve officers being recalled to active duty are of the rank of Lieutenant and below, which will include officers in the age group of roughly 30-35 and below. It is a certainty, then, that the quality and range of instructors available for service in an education program are definitely far below those which prevailed during and

² Cyril G. Hoyle, Albert W. Burr, Thomas H. Hamilton, and John A. Yale. The Armed Services and Adult Education. Washington: American Council on Education, 1949, p. 35.

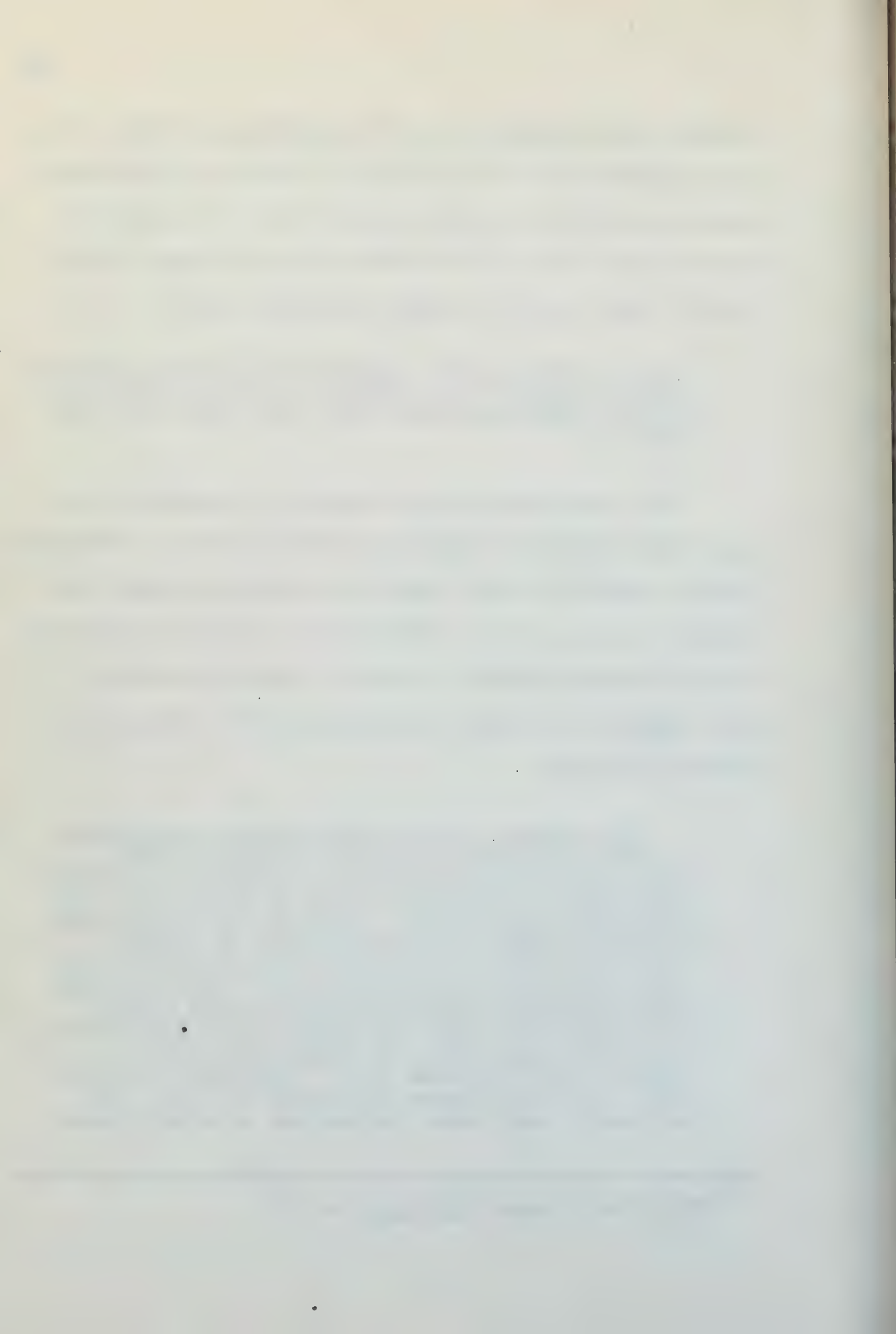
shortly after World War II. The detrimental effect that this situation has on the over-all quality of the Navy's education program became apparent when it is realized that the very heart of the educational program during the war years was the locally organized class.

...It is known...that enrollments in correspondence courses numbered some 200,000, while attendance in locally organized classes was more than twice that number.⁵

The importance of the quality of instruction in the Navy's off-duty classes was reflected in an evaluation survey conducted in the summer of 1946 by the Test and Research Section of the Standards and Curriculum Division of the Training Activity, Bureau of Naval Personnel. The project was a formal evaluation of the Educational Services Program.

The study...showed that the men's evaluation of off-duty classes depended largely on their evaluation of the instructors. There was a marked relationship between the value of classes and the quality of instructors. Among men who rated their off-duty classes as very valuable, 74 percent said their instructors were very good; 11 percent said pretty good; 5 percent, poor. Among men who rated their off-duty classes as of some value, 53 percent said their instructors were very good; 33 percent said they were pretty good; and 7 percent said they were poor. Among men who rated their off-duty classes as a waste of time, only 13 percent said their instructors were very good,

⁵ Houle and others, op. cit., p. 96.



40 percent said their instructors were pretty good; and 45 percent said their instructors were poor.⁴

The participating students are not the only ones concerned with the qualifications of the instructors in an off-duty educational program. USAPF, in describing the college courses set up for use in Army Study Plans, states the requisite qualifications for the instructors in each course. A few are cited herein:

<u>Course of Study</u>	<u>Instructor Qualifications</u>
EM 754 Principles of Business Law.	College degree with legal or administrative experience.
EM 764 Auditing Theory and Procedure.	College degree with experience in auditing or accounting.
EM 252 Essentials of American Government.	College degree with teaching experience in the social studies area.
EM 250 A History of the Far East in Modern Times.	College degree with teaching experience in the social studies area.
EM 318 Plane and Spherical Trigonometry with Tables.	College degree with teaching experience in mathematics.
EM 426 Psychology and Life.	College degree with teaching or practical experience in the psychology area.

⁴ Helle and others, op. cit., p. 213.

IN 40% Electricity and Magnetism. College degree with teaching experience in physics. ⁵

These few examples make it apparent why qualified in-service instructors are not currently plentiful in the Navy. USNFI cannot be expected to lower the qualifications without jeopardizing the hopes of the participants for formal accreditation with an accredited college or university for having completed the respective courses. The solution lies elsewhere.

Official recognition of the scarcity of qualified in-service instructors is evidenced by the authorization given to local commands to hire civilian instructors on an hourly basis to instruct off-duty classes for Navy officers and enlisted men. ⁶ This action is certainly a long step in the right direction. But is it -- from the point of view of the individual -- a satisfactory, working solution to the problem? Will it appreciably increase the opportunities for higher education that exist in the Navy today?

For the sake of convenience, let us create a hypothetical Navy man and follow him in his quest for higher education. He is William Barnes, Aviation Electronics

⁵ United States Armed Forces Institute. Manual, Fifth Edition, Washington: United States Government Printing Office, October 5, 1950, pp. 103-131.

⁶ U. S. Department of the Navy. "Information and Education Program," Bureau Circular Letter No. 153-50. Navy Department Bulletin, September 30, 1950.

Boonician, Third Class. He enlisted in the Navy for a period of four years; he spent 9 weeks in recruit training at the Great Lakes Naval Training Center, Great Lakes, Illinois; he had an 8-week course at the Almon Preparatory School, Naval Air Technical Training Center, Memphis, Tennessee; he spent 24 weeks at the Class "A" school for Aviation Electronics Technicians at the same training center in Memphis. He has just reported to the Naval Air Station, Quonset Point, Rhode Island, for a two year tour of duty in a Fleet Air Support Squadron. ⁷ At Barnes is typically undecided whether or not he will make the Navy a career, but, in any event, he is desirous of furthering his education and hopes to earn a degree in Electronics Engineering.

After familiarizing himself with the surroundings and routine of his new billet, Barnes reports to his Information and Education Officer for counseling and to enroll in an off-duty education program. The I & E Officer, operating as such in a collateral capacity, describes the general requirements for an electronics engineering degree at an average accredited college, informs Barnes as to what accreditation for training and experience in the Navy, outlines the opportunities for

⁷ Fleet Air Service Squadrons are based at Naval Air Stations. Their mission is to give logistic and material support to the Navy's "streamlined" aircraft squadrons while they are based ashore.

education in the Navy, and advises him to start on his "college career" with a course in physics and/or a course in analytic geometry.

Realizing that his future shipboard years will be time enough in which to take recourse to correspondence courses, Barnes expresses a desire to attend an off-duty class in either physics or analytic geometry. No class is being held in either of these subjects and none is planned. To get a class started, here is what must be done: (A) Make an effort to find an officer or enlisted man on the station who is, first, a college graduate with teaching experience in mathematics or physics, and, second, interested enough in off-duty education to devote three or more evenings a week to teaching a class. If such a person makes his services available, it is then necessary to enroll a sufficient number of students to make the class worthwhile. Or, (B) If an in-service instructor is not available, a civilian instructor may be hired to conduct the class. There must be a minimum of fifteen applicants for the course; a request for funds must be submitted to the Bureau of Naval Personnel; a contract must be negotiated. Attrition in the class brought on by transfers or other "drop-outs" may cause the class to be cancelled when, in the opinion of the commanding officer, the number attending is too small to

justify continued expenditure of appropriated funds. Also, the instructor must use T&E texts and materials when available, thus perhaps decreasing the value to be gained from any individual instructor's particular style and methods of instruction.

In this approach to the problem the writer sees the following shortcomings that operate to the detriment of the individual student: (A) Complete lack of continuity of curriculum. There can be no long-range planning on the part of the individual Navy student or the I & E Officer. Each class must be set up as the need for it becomes apparent. (B) Too highly centralized financial control. In the event that use is being made of civilian instructors, the necessary funds for each separate class must be requested from BuPers. While it is realized that unlimited funds are not available for an educational program, the writer can see nothing to be gained by maintaining financial control of such a program in BuPers. Operating within a specified allotment, each local command can be expected to show good judgment regarding the feasibility and desirability of expending funds to utilize civilian educators. (C) Lack of coordination among individual Navy commands. This is perhaps the biggest single flaw in the whole Navy program. A Navy man who is detached

from a base which is sponsoring a very active educational program may find himself reporting to an activity which has only a very limited program or no program whatsoever. This condition has a demaging effect on the Navy student's motivation. The previously-mentioned evaluation survey showed that only 55 percent of the men aboard ship had off-duty classes available, while 73 percent of the men stationed at various Pacific bases had off-duty classes in their locations.⁸ As regards courses on the college level, the difference is undoubtedly more marked now than at the time the survey was conducted in 1945, when the Navy was at the peak of mobilization.

Correspondence Courses.

The most extensive program of correspondence instruction ever undertaken was that handled by USAFI during and shortly after World War II. As of September 30, 1945, USAFI had a cumulative enrollment of 645,227 and had provided lesson service a total of 1,493,337 times. In addition, as of this date there were 100,604 enrollments in the 65 cooperating colleges and universities. Naval enrollment in USAFI correspondence courses was 140,001, and for college and university extension courses, 40,706.⁹

⁸ Hinkle and others, op. cit., p. E13.

⁹ Ibid., pp. 97-98.

It is not hard to understand why correspondence study fitted so well the needs of the armed services. Correspondence courses can be taken at any place in the world served by postal service.

They can be taken by individuals or groups and can be started at any time. They let each student progress as rapidly or as slowly as his desires and abilities permit. Although there is no direct personal contact between instructor and student and therefore the teaching of values and insights may be somewhat limited, a well-designed correspondence course taught by a conscientious and able teacher is superior to the resources available to many civilian communities or military stations. The range of subjects which may be taught is extensive although some courses are difficult or impossible to offer because of the limits or diversity of instructional material required. 10

To the Navy off-duty student who is desirous of earning a degree and to whom one course of study is a link in his curriculum chain and not an isolated educational experience, a correspondence course is stop-gap in nature. The biggest handicap is lack of contact between student and instructor and among students. It is well known that in many instances there is more to be learned from the instructor than from the texts in the course covered. The academic reputations of our institutions of higher learning are based, for the most part, on the quality of their respective professorial staffs, rather than on the syllabi of the courses offered.

¹⁰ Houle and others, op. cit., p. 83.

The amount of correspondence work that is acceptable by the various members of the National University Extension Association which are cooperating with the United States Armed Forces Institute is indicative of the relative value placed on correspondence study. A study of the pamphlet, "List of Courses Offered by Cooperating Colleges and Universities Through United States Armed Forces Institute," published by the Departments of the Army, Navy, and Air Force, makes it apparent that the Navy student can hope to complete no more than approximately one-fourth of the courses required for a degree by means of correspondence courses.¹¹ Knowledge of this is in itself a potential suppressor of motivation.

The limited value placed on courses carried through correspondence study is clear, and it does not seem wise to advocate that the various colleges and universities increase the amount of acceptable correspondence credit. The pertinent point is that opportunities for educational achievement on the college level through correspondence study are definitely limited. These opportunities do not provide adequately for the educational needs that exist in the Navy today.

¹¹ See Appendix I, p. 87, for excerpts from the pamphlet, List of Courses Offered by Cooperating Colleges and Universities Through United States Armed Forces Institute.

Enrollment in a Civilian Institution

The third general method of gaining college experience in the Navy off-duty program is by enrolling in a civilian educational institution, with a goodly portion of the tuition cost being paid by the Navy Department. This approach to the problem represents a satisfactory solution for those Navy students fortunate enough to be stationed within commuting distance of an accredited institution of higher learning. Satisfactory completion of a course brings automatic accreditation; the quality of instruction is presumably the best available; the student has recourse to the advice of professional educators; and in many cases attendance at evening classes satisfies residence requirements. However, this phase of the Navy education program has its shortcomings, too.

Approximately 67 percent of the men and women in the Navy today are in sea-duty or overseas billets.¹² Of the remaining 33 percent who are stationed within the continental limits of the United States, the author can only estimate that portion stationed within a reasonable commuting distance of an accredited college or university. 70% - 80% is perhaps a generous estimate. This

¹² This information was obtained in a January, 1950, interview with LCDR C. Koenigsberger, USN, Officer-in-Charge of the Field Program Unit, Information and Education Section, Training Division, Bureau of Naval Personnel, Navy Department, Washington, U. S.

means, then, that at the most approximately 25% of all Navy men and women have the opportunity to attend off-duty classes at an accredited college or university.

The official letter authorizing the expenditure of Navy funds for payments of partial tuition at colleges and universities states that the individual commanding officers will approve only those courses which contribute to the improved performance of duty or the professional capabilities of the Navy students requesting this financial assistance. Depending upon the interpretation given this by the respective commanding officers, this stipulation serves to brand this phase of the educational program as for vocational improvement rather than as an effort to build high morale and to afford individual officers and men an opportunity to satisfy their own educational desires. It means that the Yeoman from Wisconsin will not be able to study dairy farm administration, that the Ordnanceman from Montana will not be able to pursue a course in mining engineering, and the Aviation Structural Mechanic from New York City will not be able to start his education in business administration until he leaves the service. Barnes, our Aviation Electronics Technician, will be able to commence an electronics engineering curriculum; it is fortunate that his post-Navy vocational interests are related to his Navy job. These officers and men who interrupt

their college careers to enter the service are not able to continue their particular courses of study in civilian institutions while in the Navy unless their Navy jobs are related to these courses of study.

This stipulation represents a manifestation of the Navy's over-emphasis on technical training at the expense of the benefits to be derived from a broad educational background. If those Navy men -- who are desirous of satisfying personal educational objectives and who can qualify for acceptance into an accredited college or university -- actually need some sort of training to improve their performance of duty or to increase their respective professional capabilities, the Navy would certainly fill the need through additional or more intensive Navy training programs. Is no consideration to be given to the man who wishes to pursue a course of study which is not even remotely related to his Navy job? One of the four stated objectives of the Navy Voluntary Educational Program are: (1) To provide continuing educational opportunities for Navy personnel, and (2) To assist Navy personnel to employ their leisure time profitably and to satisfy their intellectual interests. Must these educational opportunities be related to one's Navy job? Is it essential that the Navy, in addition to the individual, profit from one's leisure-time activities? Must one's intellectual interests be vocational in nature in order for one to qualify

for financial assistance for tuition payment?

It is probable that the greater portion of Navy men desirous of enrolling in civilian institutions of higher learning will take up courses of study related to their Navy jobs. One of the bases for an individual's particular interests is the type of work he does in the day-to-day routine. However, to deny college opportunities to those men who wish to study courses unrelated to their Navy jobs is to lose sight of the above-mentioned objectives.

Thus, in viewing the college-level phase of the Navy Voluntary Educational Program in its entirety, the writer finds the following shortcomings:

- I. Off-duty classes at Navy activities:
 - (A) Lack of in-service educators and educational administrators with adequate qualifications.
 - (B) Lack of continuity of curriculum.
 - (C) Too highly centralized financial control when conducting a program utilizing civilian instructors.
- II. Correspondence courses: Limited amount of degree credit available at accredited colleges and universities.
- III. Enrollment in a civilian institution:
 - (A) Available only to those officers and men who are shore-based in the United States within commuting distance of an accredited college or university.

- (H) Financial assistance available only to those men who pursue courses of study which will contribute to the improved performance of duty or the professional capabilities of the respective individuals.

To these criticisms can be added the comprehensive comment that there is a lack of uniformity of educational opportunities among the various Navy activities. Except when pursuing a correspondence course, the individual student must embark on a new educational program with each change of duty.

Such a program is not geared to the Navy of 1963. The officer and enlisted ranks of today's Navy are filled with men who know the value of education and who need sustained opportunities for educational achievement. The thousand-plus men who are entering the Alton Preparatory School at Memphis each month with an average score of 64 in the Navy General Classification Test ¹³, which places them -- intelligence-wise -- in the upper 7% of our country's population; the chief petty officers and other senior petty officers who would like to become commissioned officers and who will become commissioned

¹³ The Navy General Classification Test, commonly called the Navy GCT, is a verbal intelligence test which is taken by all recruits as a part of the Navy Test Battery administered during recruit training. The mean score is 50. The average score for men now in recruit training at the Great Lakes Naval Training Center is 55. The maximum possible score is 77. The minimum possible score is 22.

officers in the event of all-out mobilization; the officers who complete the College Training Program still lacking a few credits for a degree; the graduating high school seniors and the college students who have had to enter the service during the present emergency but who plan to continue their formal education when they return to civilian life -- these are the men who need the educational opportunities. They are not now available.

CHAPTER VI

A NAVY VOLUNTARY COLLEGE EDUCATION PROGRAM

A clear statement of objectives is of paramount importance. The stated objectives of the Navy Voluntary Education Program as a whole are as follows:

- A. To provide whatever supplementary education is necessary for Navy personnel to perform their assigned duties effectively.
- B. To assist Navy personnel to meet the educational requirements for career advancement.
- C. To provide continuing educational opportunities for Navy personnel.
- D. To assist Navy personnel to employ their leisure time profitably and to satisfy their intellectual interests.

The college-level phase of the program should be established and maintained so as to realize these objectives. The degree of implementation of the program at any given time is necessarily dependent upon the military exigencies of the day and the amount of funds available. Thus, the program must be flexible in nature.

The Navy and the Colleges

The courses of study at the United States Naval Academy, Annapolis, Maryland, and at the United States Navy Postgraduate School, Annapolis, Maryland, are the only Navy-sponsored and Navy-conducted programs of

education and training that lead to the granting of degrees. Both of these institutions are fully accredited and are authorized by law to grant specific degrees. Various other Navy-sponsored courses of study are conducted at civilian institutions. The individual students qualify for acceptance by these institutions and receive degrees when they fulfill the requirements stipulated by the respective institutions. Two examples of such courses of study are that of law at Catholic University and that of Personnel Administration and Training at the Ohio State University. The officers enrolled in such courses are full-time students. They are being trained for improved and specialized performance of duty.

However, as regards voluntary education the Navy has no desire to move into the field of education in a general sense. That is to say, the Navy is not striving to set up an institution of higher learning and to grant degrees. This is as it should be. Tradition, years of experience, and long-standing principles of public and professional acceptance restrict successful endeavor in the field of higher education to our colleges and universities. The Navy can do more for the student in an off-duty program by giving him access to civilian educational opportunities. It follows that a successful off-duty college education program will necessarily call for

close cooperation between the Navy and the appropriate college or university whose facilities and faculty are being utilized. It follows further that if the program is to enjoy Navy-wide standardization of policies regarding requirements, standards, and accreditation, there must be cooperation and coordination among the separate Navy commands and among the various participating colleges and universities.

The university bureaucracies, steeped in tradition and covered with ivy, can be generally expected to resist any attempt at standardization of curricula, entrance requirements, accreditation policies, and degree requirements. The desire for individuality is apparent and understandable. However, if such standardization can (1) increase the effectiveness of our armed forces through improving the morale and efficiency of the officers and men, (2) contribute to the over-all national effort to effectively train and utilize manpower, (3) utilize effectively the trained educators on university and college staffs during a period of decreased student load, and (4) offer opportunities for higher education to thousands of men and women who would otherwise not have these opportunities, then the colleges might well consider a standardized program for off-duty education.

The basic planning for such a program must be done cooperatively by representatives of the Information and Education Section, Training Division, Bureau of Naval Personnel, and representatives of the colleges and universities -- presumably the American Council on Education. Fundamental to the success of such a program will be a clear understanding and agreement on the part of the participating institutions (including the Navy) of the division of authority and responsibility. The following basic division is suggested:

Authority and Responsibility:

A. The colleges and universities.

1. Entrance requirements and academic standards.
2. Instructors.
3. Accreditation and degree granting.

B. The Navy.

1. Administration and coordination.
2. Physical facilities and materials.

C. Jointly: Curricula.

Entrance Requirements and Academic Standards

The minimum requirements for acceptance into the college program and the minimum academic standards that must be maintained by a student active in the program

should be established by the colleges and universities concerned. In order for the participating students to obtain lasting benefits from the program, the standardized requirements and standards agreed upon should be on such a level as to have the program accepted as being conducted by an accredited institution.

It is realized that the requirements and standards of the participating colleges and universities might well vary from institution to institution. College "A", cooperating in the program with a Navy supply depot on the Atlantic coast, might have higher requirements and standards than college "B", which is operating an extension program on a naval air station on the Pacific coast. Standardization does not mean that college "A" must lower its requirements and standards to the level of those of college "B", or that college "B" must raise its requirements and standards to the level of those of college "A", or that there must be a compromise. It means that college "A" will agree to admit those students who have done satisfactory work at college "B" in the Navy program, and vice versa. The final decision must be absorbed by the student.

It must be recognized by the Navy that while a general lowering of standards and entrance requirements would result in more students being able to participate

in the program, this also lowering would work to the detriment of those individuals who can qualify at the higher level. In making an effort to transfer to an accredited, non-participating college or university upon return to civilian life, or in offering a record of academic achievement when competing for employment or advancement in the civilian world, the on-Navy student will realize the advantages of having participated in a fully accredited program.

Instructors

In order for the Navy Voluntary College Program to be accepted as fully accredited, the instructors active in the program must be qualified to teach on the college level. With few exceptions, this precludes the use of in-service instructors. Each individual institution should be responsible for the assigning of instructors to the classes over which it has cognizance. Depending upon the extent and magnitude of the college program, the program can effectively utilize the services of college instructors who might otherwise have too light a load due to the drafting of thousands of college students and college-bound high school graduates. The Office of Education reported that in some 350 institutions in the autumn of 1940, a loss of about 7.3% in over-all

enrollment and about 0.7% in fraction was experienced.¹ The loss may be considerably larger by the summer of 1951. Although some of the slack in effective utilization of university and college staffs is being taken up by increased activity in the various fields of research, it appears that there should be a considerable number of qualified instructors available for service in a Navy college program. It is believed that the smaller accredited colleges, which are not in a position to handle extensive research projects, will be more likely to have an excess of instructors. For this reason it is recommended that they be given every opportunity to participate in any extensive off-duty program.

In order to be available to the maximum number of Navy men and not to discriminate against any because of type of duty assignment, and in order to permit a Navy man to enjoy voluntarily in the program, the college program will necessarily need a part-time phase. This may offer some difficulties for civilian instructors. However, it is both desirable and feasible to authorize college instructors to sail aboard Navy ships, even on extended

¹ American Council on Education. "Preliminary Report of Conference on Higher Education in the National Service," Bulletin, Higher Education and National Affairs, No. 150, October 14, 1950, p. 11.

crises. Civilian technicians frequently accompany Navy units on cruises. To cite an example, three civilians -- a German representative, a trait-intelroy representative, and an aircraft instrument specialist -- accompanied Fighter Squadron 51 on a carrier qualification cruise in the Spring of 1950. Naturally, proper clearance through security channels is a prerequisite. Once cleared, a professor would be in a position to be authorized to sail on any Navy vessel as needed.

Let us consider a hypothetical situation: A division of destroyers is scheduled to depart for a four-month tour of duty in the Mediterranean area. Three professors -- one each in mathematics, English, and French -- could be designated to accompany the division on the cruise. While on the cruise the professors could be rotated among the ships so that each ship's company can have classes in mathematics, English, and French. The shipboard routine of watch-standing and daily work would probably necessitate each professor conducting three or more classes each day, amply justifying their presence aboard ship. If it is organized with care and conducted with conviction, this shipboard phase can become the very heart of a Navy Voluntary College Program.

Physical Facilities and Materials

Regarding the place of a college program as conducted at shore-based activities, it is recommended that the classes be held on the Navy Reservations rather than on the university campuses, except those classes which require special equipment, such as laboratory drills. One of the implications for adult education arrived at by Cyril O. Houle and his aides in their study of armed forces educational programs was that "participation in adult educational activities will be increased if they are located geographically close to the student."² Less time and effort will be expended if the instructor is called upon to do the necessary commuting.

It is believed that each Navy activity has ample classroom facilities to handle a fairly large college program, making it unnecessary to contract for the use of such facilities on university campuses. The proximity of university campus to Navy reservation in each case will be the deciding factor. One recognized advantage for holding classes on the campus is that interested civilian students may attend, thus affording a class-room interaction of ideas which should prove beneficial to both Navy and civilian students. Also, a wider selection of courses would be available to the Navy student attending classes on the campus.

² Cyril O. Houle, Elbert V. Rupp, Thomas E. Hamilton, and John H. Yale, The Armed Forces and Adult Education. Washington: American Council on Education, 1947, p. 124.

As regards text books and study materials, it is recommended that as much use as is practicable be made of GPO materials. This will lead to better standardization of courses and lower expenditure of funds. It is further recommended that all books be maintained in a central I & E library on each Navy reservation, and that students make use of them on a reasonable basis, the guiding factor here being economy.

Accreditation and Degree Granting

The functions of accreditation and degree granting must necessarily fall under the jurisdiction of the colleges and universities. Accreditation will consist of granting academic credit for courses successfully completed and for evaluating the appropriate levels of academic achievement of students entering the program. Each student can have a transcript of courses completed included in his service record. Upon completion of a given course, a certified entry can be made in the student's transcript, in the university's files, and in the files of the student's Information and Education Officer. Upon transfer to another command, the student's service record transcript -- together with a progress report of any course or courses interrupted by the transfer -- would accompany him and would indicate to the I & E officer at the new duty

station into what phase of the local educational program the transferred student should be fitted. If necessary, verification of the transcripts can be obtained from the former I & E Officer or the university affiliated with the former command.

The function of granting degrees is that in which most of the cooperating colleges and universities will have to waive their traditional requirements of residence. There are several possibilities of the student who completes all of the courses required for a given degree. He can receive the degree from (1) that college with which he carried the greatest number of "senior year" courses, or (2) that college with which he carried his final courses or courses. For the convenience of the individual student, the latter alternative is recommended.

Proof that higher education can be effectively carried to the service man is evidenced in the excellent college education program being conducted by the College of Special and Continuing Studies, University of Maryland. The College has 21 centers in the United States and 43 centers located in Europe and North Africa. The European program utilizes regular university professors, and any credit given in this program is counted as regular University of Maryland credit. Any university which accepts work done on the campus of the University of Maryland

also accepts this credit, since a University of Maryland transcript makes no distinction between off-campus and on-campus work. Residence requirements are met by a man taking courses in Europe and North Africa. In the term that was in progress in October and November of 1940, there were 4,037 enrollments in the program. The overseas student can earn a degree of bachelor of science in military science, while there are many courses available in other fields of study. ³

The University of California has a similar undertaking in the Pacific and Far East. The best information available to the writer indicates a similar program, with a degree of bachelor of arts being offered. The following points in these two programs are deserving of special attention: (1) Regular university professors are being utilized. (2) Participation in the program is accepted as residence work. (3) Degrees are granted. Inasmuch as the GI overseas is not able to attend a university, the Universities of Maryland and California are literally taking the university to him.

³ This information was received in a personal letter to the author from Dr. Joseph H. Ray, Dean of the College of Special and Continuation Studies, University of Maryland.

Administration and Coordination

In the Navy Voluntary College Program suggested by the writer, the Navy would be called upon to perform the normal functions of college administration insofar as the students are concerned. Registration, class scheduling, disciplinary matters, tuition payments, withdrawals, etc., should be handled in a uniform manner throughout the Navy by the individual I & N Officers or by the administrative heads of the various geographic segments of the college program. Such administrative action as is related to entrance requirements, academic standards, instructors, accreditation, and degree granting should be the manifestation of the policies of the program as established by the cooperating colleges and universities.

The responsibility for coordinating the college program on a Navy-wide scale must necessarily be vested with the Navy. That is to say, management control must be vested with the Navy just as technical control (over what takes place in the classroom) must be the responsibility of the colleges and universities.

The program should be coordinated and standardized from the point of view of the individual student. If AT Barnes is detached from NAS Quonset Point with orders

to proceed to another duty station, he will want to continue the same course of study from which he must withdraw when leaving Boston Point. It is recommended that college terms or quarters follow the same calendar schedule on a Navy-wide basis. In Navy's European program, the same calendar schedule is followed in all 42 centers. This would be of particular advantage to the shipboard students, who would move smoothly into the shore-based program when their respective ships come into port.

Curricula

The curricula offered in the Navy Voluntary College Program should be the result of careful consideration of the following: (1) The colleges and universities, which will supply the instructors, award credit, and grant degrees; (2) The Navy, which has a right to expect a reasonable return from its investment in the way of increased vocational efficiency of officers and men, and higher morale; (3) The progressive students, who cannot be expected to maintain a sustained interest in the program unless they are offered courses they desire; and (4) The nation as a whole, which would benefit by having the students prepare themselves for work in the fields of engineering or engineering technology or engineering management.

qualified personnel, such as the engineering field and the teaching field.

The decision regarding the type and scope of the curricula should be the result of an understanding reached between representatives of the colleges and universities, who will represent the academic interests of the colleges and universities and the interests of the nation as a sovereign entity, and the representatives of the Navy, who will represent the interests of the individual students and the interests of the Navy as a military organization. It is believed that the interests of the students should be given primary consideration when the program is established. As the program progresses and develops, the interests of the students can be directed to some degree by means of good counseling to parallel the interests of the other concerned parties.

Set forth below is the curriculum of the University of Maryland's program, which leads to a degree of Bachelor of Military Science: ⁴

FRESHMAN YEAR	CREDITS REQUIRED	
	Semester	
	I	II
Constitution and American Government	3	3
Sociology of American Life.....		3

⁴ University of Maryland. Maroon Program Bulletin, Major L. Heidelberg, Germany, September 15, 1945, pp. 13-19.

American Government.....	3	
Public Speaking	3	3
Algebra, Trigonometry, and Analytical Geometry	3	3
Modern Language - First Year	3	3
Basic S.C.F.C.	3	3
Physical Activities	1	<u>1</u>
Total	16	16

SOPHOMORE YEAR

Composition and World Literature OR Composition and English Literature	3	3
History of American Civilization	3	3
Advanced Public Speaking	2	2
Elements of Physics	3	3
Modern Language - Second Year	3	3
Basic S.C.F.C.	3	3
Physical Activities	1	<u>1</u>
Total	18	18

JUNIOR YEAR

Military Speech and Command	2	2
Gas Engines, Tractors, and Automobiles	3	3
Fundamentals of Economics	2	
Engineering Drawing	2	
Plane Surveying	2	2
Advanced S.C.F.C.	3	3
Minor Sequence	1	<u>6</u>
Total	18	16

SENIOR YEAR

International Political Relations OR International Law OR American Foreign Relations OR		
Political Science	3	
Military Logistics		3
Military Leadership		3
Military Policy of the United States	3	
Advanced S.C.F.C.	6	6
Minor Sequence	3	<u>3</u>
Total	15	16

It can be seen that this curriculum will tend to improve the in-service efficiency of the student, while at the same time affording the student with a fairly broad cultural education. While the degree of military science as such will be of little or no value to a man returning to civilian life, it does represent a significant level of academic achievement. Many of these courses, all of which can be taken for credit, can be used as spring-boards into other fields of study.

For the Navy college program, the author recommends that consideration be given to three basic curricula; one in the field of engineering, one in the field of business, and one in the field of social studies, with emphasis on education and psychology. As much over-lap as possible in the respective curricula should be encouraged. Perhaps a starting point would be to offer a course of study leading to a degree of bachelor of science in naval science, with as many electives as possible in the curriculum to permit the individual student to prepare for further study in a field of his choice. It must be remembered that this suggested program is voluntary in nature. If a Navy man is to sacrifice a goodly number of his leisure hours to participate in this program, it must be directed toward the achievement of goals that he feels to be real and significant.

CHAPTER VII

SUMMARY

The opportunities for higher education now available to Navy officers and men through the Navy Voluntary Education Program are inadequate. The three general methods of study -- correspondence courses, organized classes on Navy reservations or ships, and individual enrollment in nearby college classes -- considered individually or as a whole, do not constitute a real, sustained opportunity (on a Navy-wide basis) for a Navy man to earn a college education during his leisure hours.

The colleges and universities of our country have recorded their willingness to be of all possible service to the nation in connection with programs which will strengthen the position of the United States in the world of today and in the years ahead.

It is proposed that a Navy Voluntary College Program be established, utilizing the services of the colleges and universities and at the same time gearing the opportunity for higher education to the present needs of the individual Navy man, the Navy as a whole, and the Nation. It is recommended that technical control of this program be vested with the colleges and universities, and that

management control be vested with the Navy. Fundamental to the success of such a college program would be Navy-wide standardization of entrance requirements, academic standards, accreditation, quality of instruction, and opportunity for participation.

Consideration of a Navy Voluntary College Program is specifically recommended to a conference between representatives of the nation's colleges and universities and representatives of the Information and Education Section, Training Division, Bureau of Naval Personnel, Washington, D. C.

A final possibility for consideration is the establishment of such a college program to include participation of the officers and men of all three branches of our nation's armed services.

APPENDIX I

The following excerpts are from the pamphlet,
 "List of Courses Offered by Cooperating Colleges and Uni-
 versities Through United States Armed Forces Institute."
 Departments of the Army, Navy, and Air Force. Washington:
 U. S. Government Printing Office, October 1940.

Brigham Young University, Provo, Utah.

...Not more than 36 hours, of the total 180 re-
 quired for graduation, may be earned by corres-
 pondence credit. No graduate credit may be
 earned in correspondence courses....

University of Colorado, Boulder, Colorado.

...Students who have fulfilled college entrance
 requirements will receive college credit for
 correspondence courses satisfactorily completed.
 This credit will be accepted toward the require-
 ments for the bachelor's degree. If a student
 has not matriculated in a college, but completes
 a correspondence course, the credit earned will
 be held as "extension credit" until such time as
 he is accepted for college entrance.

Correspondence study for advanced degrees is not
 permitted except to make up deficiencies in under-
 graduate work. The minimum requirements for the
 master's degree must be done in residence.

In the College of Arts and Sciences, credit may be
 allowed toward a bachelor's degree for not more
 than 30 hours in the Extension Division. If this
 number not more than 48 hours may be by corres-
 pondence....

...In the College of Engineering a student may
 offer the equivalent of three quarters of corres-
 pondence study credit toward the bachelor's degree.

This is approximately one-fourth of the total amount required for the degree.

In the School of Business, a total of 90 quarter hours for courses taken in the Extension Division, either through correspondence study or class instruction, may be applied toward the requirements for the degree bachelor of science (business)....

...Credits earned by correspondence are not accepted by the School of Law to satisfy requirements for admission.

University of Florida, Gainesville, Florida.

...The University of Florida regulations provide that not more than one-fourth of the total number of hours applied toward a degree may be completed by correspondence or see study and/or extension work. In keeping with this regulation, the University will recognize correspondence courses on the college level taken through the United States Armed Forces Institute, provided such courses are taken with a college or university which is approved by the National University Extension Association and providing the institution giving the course will certify that credits would be allowed for such courses toward a degree at that institution.

State University of Iowa, Iowa City, Iowa.

...Not more than 50 semester-hours of the required credits for the bachelor's degree can be earned by correspondence. At least 40 of the last 50 hours must be taken in residence.

University of Michigan, Ann Arbor, Michigan.

...It is possible for men in the Armed Forces to accumulate a maximum of 30 hours credit through correspondence study toward a degree at the University of Michigan.

University of Oklahoma, Norman, Oklahoma.

...At the University of Oklahoma, 30 credit hours of correspondence work, generally, may be applied toward a bachelor's degree.

University of North Carolina, Chapel Hill, North Carolina.

...It is the policy of the University of North Carolina to accept for undergraduate degree credit one year of correspondence work taken from institutions having membership in the National University Extension Association, provided a grade of "C" or better has been earned and the courses taken fit in with the program to be followed here. The last year's work for a degree may not be taken by correspondence, but must be taken in residence here.

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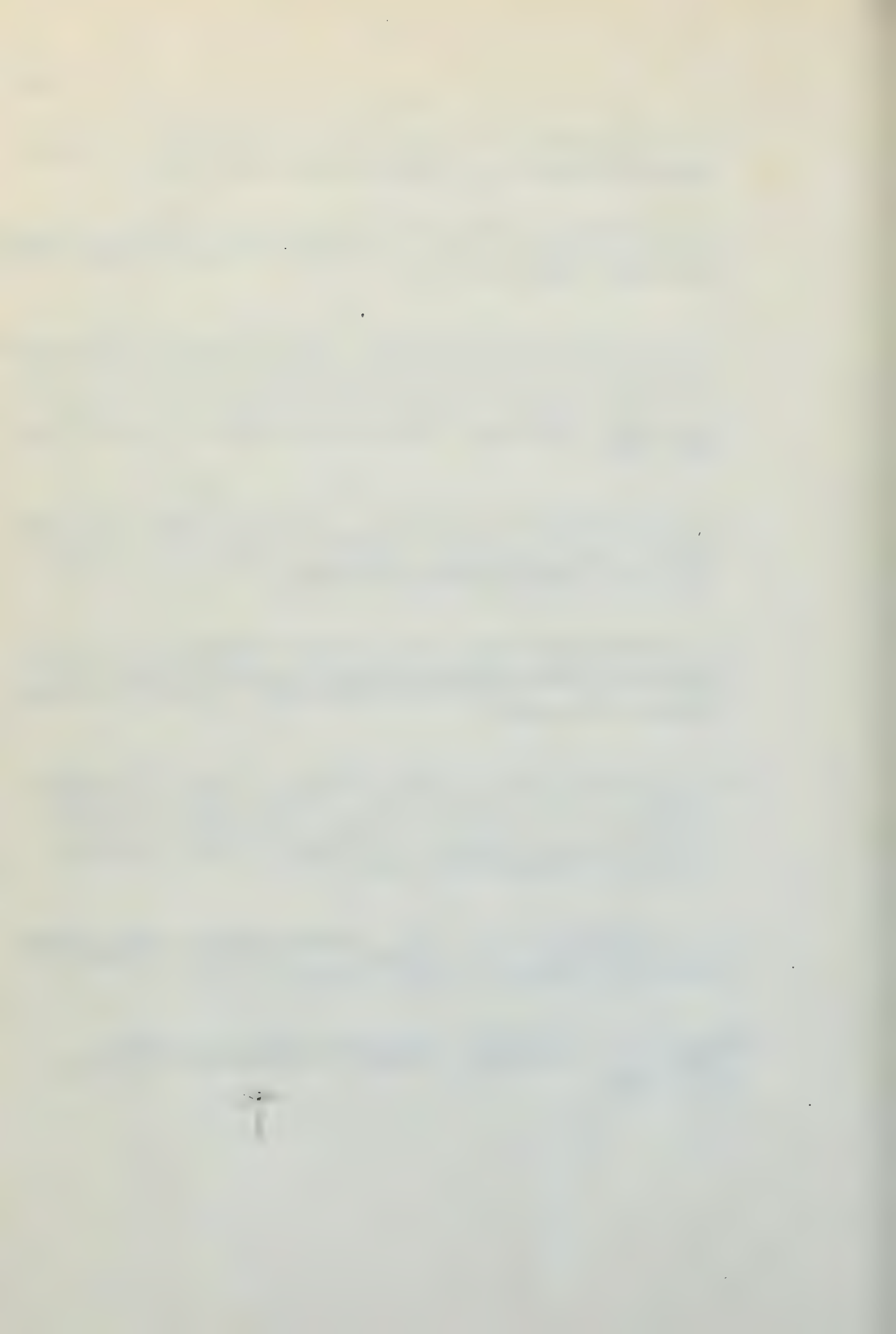
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